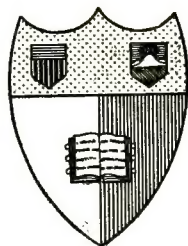


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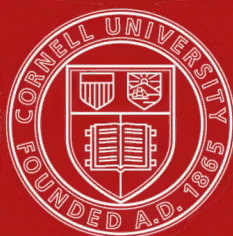


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# BOARD OF INQUIRY

INTO

# COST OF LIVING

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## REPORT OF THE BOARD

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### VOLUME I.



OTTAWA.

PRINTED BY J. DE L. TACHÉ, PRINTER TO THE KING'S MOST  
EXCELLENT MAJESTY.

1915





BOARD OF INQUIRY

INTO

COST OF LIVING

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REPORT OF THE BOARD

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VOLUME 1.



OTTAWA  
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# BOARD OF INQUIRY INTO COST OF LIVING

OTTAWA, ONT., August 1, 1914.

To the Right Honourable Sir R. L. BORDEN, G.C.M.G., P.C.,  
Prime Minister of Canada.

The undersigned members of the Board of Inquiry, appointed by Orders in Council on the 20th December, 1913, and 22nd January, 1914, to make an investigation into the increase in the cost of living in Canada and the causes which have occasioned or contributed to such result, have the honour to present the following report:—

## I.

### INTRODUCTORY.

A. Orders in Council appointing the Board of Inquiry, and instructions issued in connection therewith, are as hereinafter set forth, viz.:—

*P.C. 3195. Certified copy of a Report of the Committee of the Privy Council, approved by His Royal Highness the Governor General on the 20th December, 1913.*

Upon a memorandum from the Prime Minister setting forth that representations have been made to the Government by the governing bodies of several of the cities of Canada and by other representative bodies and persons asking that an investigation be made into the increase in the cost of living in Canada and into the causes which have occasioned or contributed to such result.

The Prime Minister reports that having conferred with the Minister of Customs, the Minister of Agriculture, and the Minister of Labour, he has been informed by them that such an investigation in the first instance might be made by permanent officials of the Government, and that they recommend that John McDougald, Esquire, Commissioner of Customs; Charles C. James, Esquire, Agricultural Commissioner, and Robert H. Coats, Chief Statistician of the Department of Labour, should conduct such inquiry and report thereon as soon as possible.

The Prime Minister, therefore, recommends that such an investigation be made forthwith and that the Minister of Customs, the Minister of Agriculture and the Minister of Labour be authorized to instruct the said officials to enter upon such investigation and to co-operate for that purpose, employing and utilizing all information which may be available in the several Departments of the Government and obtaining such further data and information as may be necessary or useful for the purposes aforesaid, and that the said officials report upon the matters aforesaid with the least possible delay.

The Prime Minister further recommends that John McDougald, Esquire, act as Convenor and Chairman of the Board so constituted.

The Committee concur in the foregoing and submit the same for approval.

RODOLPHE BOUDREAU,  
*Clerk of the Privy Council.*

*P.C. 194. Certified copy of a Report of the Committee of the Privy Council, approved by His Royal Highness the Governor General on the 22nd January, 1914.*

The Committee of the Privy Council, on the recommendation of the Right Honourable the Prime Minister, advise that Joseph Ulric Vincent, Assistant Deputy Minister of Inland Revenue, be appointed a member of the Board authorized to be constituted by the Order in Council of the 20th December, 1913, for the purpose of inquiring into and reporting upon the increase in the cost of living in Canada and the causes which have contributed to or caused the increase.

RODOLPHE BOUDREAU,

*Clerk of the Privy Council.*

Further instructions are as follows:—

PRIME MINISTER'S OFFICE,

OTTAWA, January 8, 1914.

SIR,—In connection with the investigation which is being carried on by yourself and by Messrs. C. C. James, C.M.G., and R. H. Coats, I desire to inform you that in case you and your colleagues in the inquiry should find it desirable or convenient to be invested with power to subpoena witnesses, to examine them on oath or affirmation and to send for persons, papers and records, the necessary Order in Council for that purpose will be passed and submitted for the approval of His Royal Highness the Governor General. If, in addition to the powers alluded to, you should find it convenient or desirable to be invested with any other powers within the scope and meaning of the Inquiries Act and the amendments thereto, the Government will be glad to have your suggestions and will give immediate consideration and attention thereto.

Yours faithfully,

R. L. BORDEN.

JOHN McDUGALD, Esq., C.M.G.,

Chairman of Commission to Investigate the High Cost of Living,  
Ottawa.

In undertaking to comply with the terms of the Order in Council for an investigation into the increased cost of living in Canada, and the causes which have occasioned or contributed to such result, the Board has availed itself of materials which have been collected by various executive departments and other existing materials.

Meetings have been held, and data and information relative to the subject of the inquiry have been obtained by the Board in the following cities, viz.:—

Halifax, in the province of Nova Scotia.

Saint John, in the province of New Brunswick.

Quebec and Montreal, in the province of Quebec.

Ottawa, Hamilton, Toronto, and Port Arthur, in the province of Ontario.

Winnipeg, in the province of Manitoba.

Regina and Saskatoon, in the province of Saskatchewan.

Calgary and Edmonton, in the province of Alberta.

Vancouver and Victoria, in the province of British Columbia.

It should be noted that this report deals with conditions only up to August 1, 1914.

The cost of living is not really a simple question, and the more closely it is examined the less simple it appears.

The phrase "cost of living" means different things to different people, quite apart from the fact that it is identified with the standard of living.

The standard of living has an important influence on the cost of living, but that standard changes from time to time and from country to country, and it is different for different classes of people in the same country at the same time, and differences are observable in the modes of living of the same class, time and locality.

The cost of living has been defined, in a concrete form of expression, as meaning "the sum of the exertions and sacrifices necessary to maintain life."

It is, however, the advance in commodity prices, rents and in cost of service, which has chiefly attracted attention in Canada and is attracting attention in all countries—the advance in prices being world-wide.

The subjects bearing on this inquiry cover such wide grounds that the report of the Board is of necessity somewhat in summary form.

Detailed statistical tables, with explanatory notes and various memoranda relative to cost of living appear in the appendix to our report.

## II.

### STATISTICS.

In an investigation into the increase of the cost of living the first step is manifestly to determine the facts as to the extent of the advance in prices.

In collecting and presenting price statistics it is necessary to distinguish between wholesale and retail prices. The former are more sensitive to industrial and commercial changes. Competition operates less effectively upon retail than upon wholesale prices. It is the level of retail prices however as a general rule that directly concerns the consumer.

For the purposes of this inquiry therefore, special attention has been directed to the increased prices of commodities required to serve the needs of the masses in the form of necessities, comforts and the commoner luxuries.

Money, the common measure of value, supplies the means of measuring the cost.

The cost of living requires consideration, not only absolutely but relatively. The level of prices, whether high or low, is of significance only in comparison with the amount of income.

Rising prices, if accompanied by increase of incomes, may mean reduced cost of living, if measured by the ratio of expenses to earnings. On the other hand, falling prices, if accompanied by diminished incomes, may mean increased cost of living.

The statements set forth below have been furnished to the Board, relative to the cost of living, 1914, from records actually kept at Winnipeg by the persons concerned:—

# BOARD OF INQUIRY INTO

## STATISTICS RE COST OF LIVING, 1914.

Average number of persons in thirteen families 5.15

Average number of rooms for thirteen families 5.45

No. 10 shows a monthly deficit of \$10.75, income of the father \$50 per month. Children's ages, 14-10-7-4. Pays \$3 a month taxes, owning his house.

Income of father ranges from \$75 to \$114 -Average, \$89.58 (twelve cases).

Three cases at \$ 75 00 month=\$	225 00	1 case increased by lodger	\$26 00 a month.
One case " 76 00 " =	76 00	" " children	14 00 "
One " " 80 00 " =	80 00		
Two cases " 85 00 " =	170 00	" " lodger	5 00 "
Three cases " 100 00 " =	300 00	1 " " "	24 66 }
		1 " " children	20 00 f "
One case " 110 00 " =	110 00		
One " " 114 00 " =	114 00		
	1,075 00		89 66

Total average income for the twelve cases, \$97.55.

Twelve cases (omitting No. 10) average income \$97 55

Twelve " " " " expenditure 35 52

Saving 2 03 per month.

Three of above cases show monthly average deficit of \$1.54.

			Father.	Other Sources.	Children.
No. 6 deficit \$	93	Income \$	75 00	\$	6-10.
No. 7 " 3	25	"	80 00		14-5-13-11.
No. 12 " 45		"	76 00	14 00	14-12-9-5-2-8 months.

Seven of the above cases show monthly average saving of \$6.34.

			Father.	Other Sources.	Children.
No. 1 saving \$	93	Income \$	100 00	\$ 20 00	13-11-7.
No. 3 " 2	93	"	114 00		13-10-3.
No. 4 " 12	20	"	75 00	26 00	5-3-2.
No. 5 " 03		"	85 00		9-5-2.
No. 8 " 20	57	"	100 00	24 66	Three.
No. 11 " 03		"	100 00		7-3.
No. 13 " 7	75	"	110 00		9-8.

No. 1 and No. 3 pay \$13 and \$10 respectively, for furniture (per month).

			Father.	Other Sources.	Children.
No. 2 made ends meet, see details			\$85 00	5 00	7-5-4.
No. 9 " " "		"	75 00		11-6-1.

Case.	No. 1.	No. 2.	No. 3.	No. 4.	No. 5.	No. 6.	No. 7.	No. 8.	No. 9.	No. 10.	No. 11.	No. 12.	No. 13.	Average
Family.....	5	5	5	5	5	4	6	5	5	6	4	8	4	5 15
Rooms.....	7	6	6	5	4	8	4	7	4	5	5	5	5	5 46
Lodgers.....	1	1												
Children's ages.....	13-11-7	7-5-4	13-10-3	5-3-2	9-5-2	6-10	14-5-13		11-6-1	14-10-7-4	7-3	14-12-9-5-2-8M	9	
Heating.....	H. Air.	H. Air.	Stove.	Stoves.	H. Air.	Stoves.	Stoves.	H. Air.	Stoves.	Stoves.	H. Air.	Stoves.	H. Air.	
Income, father.....	\$100 00	\$85 00	\$114 00	\$75 00	\$85 00	\$75 00	\$80 00	\$100 00	\$75 00	\$50 00	\$100 00	\$76 00	\$110 00	
Income, lodgers.....		5 00		26 00										
Income, children.....	20 00											14 00		
Total income.....	\$120 00	\$90 00	\$114 00	\$101 00	\$85 00	\$75 00	\$80 00	\$124 66	75 00	50 00	100 00	90 00	110 00	97 55
Rent.....	\$27 50	\$25 00	\$20 00	\$20 00	\$24 00	\$23 00	\$15 00	\$25 00	\$15 00	\$3 00	\$32 50	\$27 00	\$22 50	\$23 04
Light.....	1 00	1 00	1 00	1 50	7 50	8 50	7 50	1 00	1 00	6 25	1 00	6 00	8 20	7 85
Fuel.....	9 00	9 75	7 25	5 85	7 50	8 50	8 00	12 50	7 00	6 25	6 66	6 00	66	69
Water.....	82	75	82	70	77	93	50	87	75	65	66	60		
Insurance.....														
Lodge, church, etc.....	4 00	2 00	4 25	2 75	3 30	75	5 50	5 42	3 00	3 90	1 66	2 00	3 58	3 24
Doctor and dentist.....	50	1 00	3 00	2 50	2 00	50	5 00	2 50	1 00	2 00	2 25	25	42	1 89
Magazines, papers, etc.....			1 50	1 00	25	25	25	80	25	50	50	25	80	59
Post, stationery.....	1 25	50	25	1 00	25	25	25	25	1 00	1 00	25	30	25	45
Car fare.....	1 00	75	1 50	50	1 00	50	2 00	50	50	1 75	50	2 00	2 08	1 12
Holidays, Christmas.....														
Recreation.....	3 00	1 00	3 50	1 25	1 00	3 50	1 00	80	1 50	1 75	4 16		6 66	2 42
Furnishing.....	213 00	2 50	210 00	1 25	1 00	1 00	1 00	1 75	1 00	1 75	2 08	3 00	80	1 46
Schooling.....	1 00		4 75		25	75	6 00		20	50	09		25	1 53
Groceries.....	20 00	13 25	28 00	20 00	20 00	14 75	20 00	20 00	20 00	19 00	25 00	18 00	30 00	20 61
Meat.....	8 00	10 00	9 00	7 25	1 25	8 00	6 00	12 00	10 00	4 25	3 33	14 00	10 00	7 93
Milk.....	3 00	3 00	2 75	3 25	4 50	2 80	7 00	3 00	3 00	3 00	1 50	5 60	3 00	3 72
Bread.....	2 50	3 00		2 50	2 20	1 45		2 50	5 00	3 00	3 00	4 00		2 90
Clothing, father.....	5 00	5 50	2 50	3 75	3 33	2 00	1 50	6 00	1 00	5 00	5 42		2 00	
"          mother.....	8 00	4 00	2 25	5 00	3 34	2 00	1 50	2 00	1 00	2 50	6 25	7 00	2 00	11 35
"          children.....	9 00	5 50	7 00	6 25	4 33	3 00	2 00	2 50	1 30	5 00	3 33		8 30	
Soap and brushes.....	1 50	1 00	1 75	2 50	2 00	50		4 00	2 00					1 43
Laundry.....					2 00			20 57						3 00
Saving.....	93		2 93	12 20	03			20 57			03		7 75	6 84
Deficit.....						93	3 25			10 75		45		3 84
Total expenses.....	120 00	90 00	114 00	101 00	85 00	75 93	83 25	124 66	75 00	60 75	100 00	90 45	110 00	95 52

<sup>1</sup> Taxes.      <sup>2</sup> Instalments on furniture not included in average.



An investigation for the British Board of Trade was made in 1911 into "Working Class Rents, Housing and Retail Prices, together with the Rates of Wages in certain occupations in the Principal Industrial towns of the United States of America," and compared with conditions in the United Kingdom.

The following extracts are taken from the introductory memorandum thereto:—

One peculiarity shown by the budgets is the comparatively small consumption of baker's bread in the average American working-class family, the consumption being  $8\frac{1}{2}$  pounds weekly per family as against 22 pounds in the United Kingdom, the place of bread being taken in the United States to some extent by rolls, cakes, biscuits, etc., on which the expenditure is about three times as great as that shown in the average British budget. On the other hand, the consumption of meat is much larger in the United States and the consumption of vegetables is also larger. The budgets indicate in general that the dietary of American working-class families is more liberal and more varied than that of corresponding families in the United Kingdom.

The comparison of wages, hours of labour, rents and prices in the areas of investigation in the two countries has been made on the bases indicated above, and, as regards prices, on the same assumption as that made in the preceding inquiries, that an English workman with an average family maintained under American conditions the standard of consumption as regards food to which he had been accustomed. Under such conditions the workman's wages would be higher in the United States by about 130 per cent, with slightly shorter hours, while on the other hand his expenditure on food and rent would be higher by about 52 per cent. The detailed figures and argument from which this conclusion is deduced are stated on pages lv to lxxvi of this report, on which pages are further elaborated the qualifications to which any such comparison is necessarily subject.

As conditions in the United States and Canada are much alike it is easy to see at a glance how the cost of production and of carrying on business in Canada is greater than in the United Kingdom.

Ratio—Wages in the United Kingdom, 100—in Canada . . .	230
Ratio—Cost of living in the United Kingdom, 100—in Canada.	152

Statistical memoranda, furnished by the Department of Labour, Canada, on conditions affecting the cost of living in Canada, are appended hereto, as follows:—

#### Appendix No. 1.—Introduction.

- " 2.—Wholesale prices, Canada, 1890-1913.
- " 3.—Retail prices, Canada, 1900-1913, with comparison of wholesale and retail prices in Canada.
- " 4.—Prices wholesale and retail in other countries.
- " 5.—Prices of services.
- " 6.—Rents in Canada and in other countries.
- " 7.—Wages in Canada and in other countries.

The Board of Inquiry has not undertaken to deal in this report with other statistical data and memoranda on prices of securities, interest, monetary and financial conditions in Canada, which have been gathered by the Department of Labour.

In Appendix No. 39 will be found "Press Extracts as to cost of living in former times."

## III.

## MOVEMENT OF POPULATION FROM THE LAND.

That products of the farm and food products have advanced much more rapidly than have manufactured articles is probably due to the fact that the demand has to some extent outgrown the production of such commodities.

This condition has no doubt been brought about to a considerable extent by the withdrawal from the farms of a large number of persons who have become food consumers rather than food producers.

The following may be stated as the main reasons suggested for preference for city or town life: higher wages in the cities and towns; working on regular and shorter hours with holidays; social advantages; better schools; amusements; the general desire of people to avoid isolation and to live where the crowds are.

The following table shows the growth of urban population as compared with rural population in Canada. This table of course, does not mean an exact classification of producers and consumers. Urban population includes all cities, towns and incorporated villages; all others are included under rural population. There is some production of food in towns and villages, and some lines of food are completed or finished as foods in the urban centres. Further, and this is important, the exclusive wheat growers of the western provinces, who are numbered under rural population, are really consumers; since they buy everything they require as food, even their flour. The removal of a mixed farmer from Ontario to a wheat farm in Saskatchewan changes him from a producer to a consumer, but he still remains in the rural class.

RURAL AND URBAN Population of Canada in 1901 and 1911 by Provinces.

Provinces.	1901.			1911.		
	Total Population.	Percentage Rural.	Percentage Urban.	Total Population.	Percentage Rural.	Percentage Urban.
Prince Edward Island ...	103,259	85·52	14·48	93,728	84·03	15·97
Nova Scotia.....	459,574	71·85	28·15	492,338	62·20	37·80
New Brunswick...	331,120	76·66	23·34	351,895	71·71	28·29
Quebec.....	1,648,898	60·20	39·80	2,003,332	51·55	48·45
Ontario.....	2,182,947	57·12	42·88	2,523,274	47·35	52·65
Manitoba.....	255,211	72·39	27·61	455,614	56·02	43·98
Saskatchewan.....	91,279	80·77	19·23	492,432	73·32	26·68
Alberta.....	73,022	71·76	28·24	374,663	62·12	37·88
British Columbia.....	178,657	49·52	50·48	392,480	48·10	51·90
Yukon.....	27,219	66·41	33·59	8,512	54·59	45·41
Northwest territories.....	20,129	100·0	.....	18,481	100·0	.....
Canada.....	5,371,315	62·36	37·64	7,206,643	54·47	45·53

## IV.

## STANDARD OF LIVING—NECESSITIES AND LUXURIES.

The demand for better conditions and the general advance of the standard of living throughout all the ranks of the population are manifestly most potent causes of the increase of the demand for commodities, and therefore of the advances of prices.

The methods of living of our so-called plain people are on a much higher plane than have existed in this country at other times.

The wants of the people have been multiplied and diversified on every side. They demand more and better things. Their requirements are larger, more varied and more exacting.

The movement is world-wide, but perhaps its influence upon existing social conditions is nowhere so strongly emphasized as in this Dominion, and in the United States of America.

There is a measure of truth in the aphorism that the high cost of living is due to the cost of high living and that our people live on a far more extravagant scale than ever before, but it is also true that food, raiment and habitation cost much more than heretofore.

In itself the improvement in the standard of living is a sign of progress, but if not rationally guided and safeguarded the advance threatens to bring about a decline of the standard to a lower level.

In the discussion of the reasons leading to the increased cost of our manner of living, consideration must be given to the increased cost not only of necessities but also to the increased cost of luxuries.

Take one of our latest large industries, the automobile, as more or less illustrative of this point.

Statement of automobiles imported and manufactured during the year, for use in Canada—exclusive of automobiles of foreign and domestic manufacture exported from Canada during the year.

Total value, \$12,000,000.

These figures are startling, especially when we consider that less than 10 per cent of all these cars are for industrial use, and that over ninety per cent are essentially devoted to purposes of recreation.

In the development of the commercial car, the automobile industry is destined yet to be the source of great reproductive activity, and an important agent in the future production of wealth.

The results of the automobile industry thus far, however, are largely represented by the opportunity it affords for luxurious recreation.

Reasonable recreation and reasonable luxury may be necessary for modern progress, but the price has to be paid and the bill is found in our high cost of living.

## V.

### INDUSTRIAL EFFICIENCY—SERVICE, PRODUCTION.

The opinion is widely shared throughout this Dominion that inefficient service through lack of vocational training is one of the notable causes which have brought about the recent advance in prices of commodities, and that the teaching in the public schools should be supplemented by courses in vocational training, in order to promote and maintain industrial efficiency.

The cost of production is affected by the supply and efficiency of service.

The scarcity of trained farm labour at a reasonable price has been the despair of the farmer.

In the cities and towns the difficulty of obtaining efficient domestic service has been a leading cause in the transfer of families from commodious homes into contracted apartments.

The "gospel of ease," preached from every platform, has permeated the national life of the Anglo-Saxon race and has had its influence in the formation of present conditions.

It is beyond question that productive efficiency is essential in the average citizen if he is to be capable of maintaining his economic value in the community, and becoming and continuing socially and industrially a sustaining and helpful unit rather than a burden.

The nations which have outstripped others in industry have done so by working harder, or rather, more efficiently. The man who works will beat the man who does not.

The spirit that has won success is the spirit of duty and work. The lessons of history teach beyond dispute that a life of ease is not conducive to individual or national well-being.

Work is the discipline of life, and when the necessity arises, we should have the energy to respond to its call.

With equal efficiency, no standard of living made possible by the wealth produced by ten hours of labour in the factory or on the farm could be maintained with fewer hours, unless wages or the value of the product be increased.

In this Dominion we are proportionately working fewer hours than ever before, and we have a greater number of the inefficient and the idle in our midst.

The result of proportionately fewer men working shorter hours with more valuable land has been an increased cost for which labour-saving devices have not compensated. These are underlying economic conditions which through the law of supply and demand have contributed to the increased cost of the necessities of life.

The following extracts from the Massachusetts Report on the Cost of Living, 1910, are worthy of consideration as bearing to some extent on conditions in this country:—

During the last five years, Massachusetts has been aroused to a realization of the inefficiency of its present educational methods. The reorganization of the State Board of Education in Massachusetts, following the work of the Commission on Industrial Education, indicates that, in this State at least, we are on the road to remedy what evils may have grown out of the old forms of education. Ever since the beginning of the public school system in Massachusetts the school child has been headed for the arts and professions, in spite of the fact that only half of the pupils graduating from the elementary grades enter the high schools, and approximately only 5 per cent finally enter college.

The per capita cost of public school education has been advancing greatly.

The teachers personally have not benefited, for their remuneration is practically unchanged; the money has been spent in the extension of a system which is not adapted to modern needs, but, on the contrary, is contributing to the causes making for the advance of commodity prices. As a result, manual labour has become a reproach. Children are ashamed of the honest occupations of their fathers, and their education leads them to the counting room and office, and away from the farm, factory and workshop. The testimony before the commission in regard to the shoe trade was to the effect that graduates from the high and grammar schools refuse to become artisans, and seek employment as clerks, bookkeepers and the like, where the remuneration will be less from the start and the chances of advancement may be smaller. The same condition is to be found in practically all manufacturing trades.

It is beyond question that productive efficiency is essential in the average citizen, if he is to be capable of maintaining his economic value in the community, and becoming and continuing socially and industrially, a sustaining and helpful unit rather than a burden.

The purpose of public school education is to secure intelligent citizenship in a democratic society, whose individuals through their suffrage govern and legislate for the commonwealth. The development, training and direction of



the intelligence of pupils should be so conducted as to supplement that intelligence with economic efficiency; and any course of studies which ignores this consideration and directs the energies of pupils into channels from which the great majority will derive no benefit, is, from the economic point of view, a waste of time, effort and expense. The ox team has been replaced by the locomotive; the sailing ship by the 200,000-ton ocean express steamer; scratching the soil to make it produce is no longer profitable, but intensive cultivation is required for success. To meet these conditions, human quality and ability must be increased; yet the essential thing to meet these changed conditions—the industrial training of the children in the school has—under great difficulty and opposition, only recently been begun.

Massachusetts is dependent on her industries for her economic well-being; the majority of her citizens are workers in those industries. In this industrial commonwealth it should be the function of the schools to train children for the work that the majority of them must do. No sane man would attempt to do away with public school training for the colleges, and thence for the arts, sciences and professions; but the 95 who must work with their hands at manual labour to live, must not be sacrificed to the 5, who need not so work.

Massachusetts is a community of workers, of producers; and yet until very recent years all the energies of our school system, its efforts, zeal and enthusiasm were diverted from the training of efficient industrial units to so-called cultural education. The more urgent needs of the productive vocations have been neglected; the mill and shop and farm, the bases of our social life and economic being, have been subordinated. Year after year we have turned out thousands of children who are unable for many causes, to attain the professions, and unfitted by misdirected education and training for industrial life. Necessity compels them to enter into competition with the crowded ranks of unskilled workers, or they must enter industrial occupations handicapped by ignorance and lack of training; in either case their inefficiency makes them a burden to the community or an expense to their parents or guardians.

Educated sufficiently to give them a distaste for manual labour, which must be the inevitable lot of the majority in all communities, the products of such a school system are insufficiently educated and trained to enter the ranks of skilled labour; their future must compass years of idleness or semi-idleness. If in the hard school of necessity they do not develop economic efficiency, they fall back into conditions and circumstances that are morally and industrially dangerous to the body politic. Misdirection of education in the public schools is disastrous in its effects on morals and industry, and surely leads to unemployment, crime and pauperism. The mockery of the plea that the poorest shall have an opportunity through education for higher and better things lies in the plain fact that our system, as it has been, makes its victims discontented with what they have, and not fit to attain what they have not.

So long as the efficient members of every state must carry the inefficient on their backs, so long as the productive members of society are compelled to support the unproductive, living must continue to cost more than it should. One remedy, a wider range in the ideals and methods of public school education, which the commission hopes and believes is under way in this state, is of intense interest to the citizens who must pay the bill. Because it believes that this is one of the causes of a decrease in production through the abandonment of the farm and the turning over of manufacturing industries to the alien, the commission feels that duty requires it to refer to this subject.

#### PRODUCTION.

The nation's welfare can be maintained only by increasing the productiveness of its labour and by judiciously directing it in reproductive channels.



Labour expended in the fields, or in the manufacture, transportation or distribution of the necessities of life, is reproductive, but labour expended in the production of luxuries is principally lost in an economic sense.

Industrial efficiency grows along lines of specialization, organization and interchange. In the stage of industrial evolution, when each man provided for himself by his own unaided exertions, we find the maximum of effort with the minimum of product.

Wealth comes from production. All must agree that the more a country produces the richer it is.

It is a vital question, therefore, to consider what course of policy will effectually develop the producing forces of a nation.

Prices are influenced by the law of supply and demand. The most rapid advance since 1900 in prices in Canada (and in the United States) has been in finished farm products (meats, dairy products, eggs, etc.), and in such articles of food as are subject only to minor manufacturing processes.

Canada is an agricultural country. Agriculture is its most important industry. Underproduction in many lines of agricultural products in Canada appears to be an important cause in the rise of prices.

The following statement shows the course of Canadian imports and exports for three years in the commodities undermentioned:—

STATEMENT for three years ending March 31, 1914.

Commodity.	Value—Imports.	Value—Exports Domestic and Foreign.
	\$	\$
Sheep.....	1,851,557	340,907
Mutton and lamb.....	1,409,834	115,362
Poultry and game.....	908,786	409,636
Canned meats.....	1,115,560	152,195
Eggs.....	7,031,803	209,283
Butter.....	4,922,401	2,709,279
Wool.....	5,495,126	1,007,364
Hides and skins, other than fur.....	30,807,900	21,596,512
	53,542,907	26,540,538

## VI.

### ADULTERATION AND INSPECTION OF STAPLE COMMODITIES.

The adulteration of products results in giving the consumer a poorer quality or smaller quantity for the same price.

The object of this practice is to obtain a larger return for a smaller value.

With rising prices it might be reasoned that the manufacturer, getting more and more for his product, would be under little temptation to practice adulteration. The facts, however, show the contrary to be true.

Adulteration has been conspicuously prevalent during the recent period of advancing prices.

Instead of advancing the prices of the products, in many instances the quality has been lowered or the quantity of the goods offered for sale at the same price has been reduced.

The ease with which milk may be adulterated makes the liability of the abuse in this case greater than in that of other food products.

This adulteration has probably affected the community more by reason of illness and disease than in direct addition to the cost of living.

Federal and provincial laws and regulations have been enacted for the inspection of food products in the interests of the public health.

These pure food laws have added unquestionably to the cost of commodities but the money spent in the prevention of disease is doubtless saved in other ways—such as in hospital maintenance, cost of sickness and other charges which are the invariable accompaniment of preventible disease.

A memorandum on the Adulteration and Inspection of Food-stuffs by Dr. A. McGill, Chief Analyst of the Inland Revenue Department, is submitted herewith as Appendix No. 15.

## VII.

### WASTE AND EXTRAVAGANCE.

#### FOOD WASTE.

Food waste occurs in three principal ways:—

1. Waste in marketing, including purchase of inedible material, purchase in small quantities, purchase for flavour or tenderness instead of nutrition, and sheer extravagance.

2. Waste in preparation, including preparation of too large quantity for the meal or day; food made inedible by poor cooking; and food unwholesome by wrong cooking.

3. Waste in supplies and cooked food thrown away.

The waste through servants is emphasized in a letter from a house-wife as published in a report on Cost of Living, 1910, as follows:—

It seems to me that the elimination of waste is nearly impossible in households where there are numerous servants; at least I have found it so, with only one, and the waste rises in geometrical progression with the number employed. I have now been doing my own cooking for nearly a year, and I feed my family twice as well on about two-thirds of the cost. A large part of the saving comes in the economical use of meat. I make a delicious dinner with a few scraps of meat that a cook would give to the dog.

Then I depend a good deal on soups, which I invent to suit my larder. A few cold baked beans with a little tomato and a bit of meat on a bone, or a little left-over gravy, make a soup that all eat with much pleasure, and it is so nourishing that it goes far to make the dinner. . . . Most people do not understand how different a soup is when it has simmered a good many hours. The soup that has been boiled fast a couple of hours will taste flat and uninteresting, whereas the same soup five hours later will have such a delicious blend of flavours that all you know is that it is nice without being able to distinguish the ingredients. Again, it is time that counts. . . . Cooks waste the coffee and tea horribly. Mix the coffee with cold water the night before, with an egg-shell, and bring it to a boil in the morning, and you do not need a great deal for a good cup of coffee. The tea in the kitchen is piled into the tea-pot and thrown out with but little of the goodness extracted. Another frightful waste is the coal. I use less than half as much as any girl I ever had, and my stove bakes better. I never complain of the draft as she does or did after burning all the goodness out of her coal in the first hour after lighting.

There is no way that I know of to eliminate waste except by looking after things yourself. This is disagreeable and practically impossible with the aver-

age type of servant. This type is created by the lazy, supercilious, absolutely stupid type of mistress who will not touch anything with the tips of her dainty fingers, and reserves the right of despising the person who does it for her. Just hear any of them talk about their servants when they are together. I always feel like telling them they have exactly what they deserve. If they could organize their households on a business basis, with the same consideration and respect for their employees that a successful business man shows, and the proper supervision that any business requires, the matter could be adjusted on a more satisfactory basis, and a different class of girls would be willing to take positions.

Notable causes of waste in marketing, kitchenette and storage facility are to be found in social conditions over which the individual has no control. The crowded living conditions in towns and cities, whether in tenement or apartment, demand the kitchenette, which has no place for supplies in bulk.

The high temperature of the apartment house prohibits any storage except for a short period.

The necessity of purchasing in small quantities comes with the kitchenette and small ice-box.

The saving in rent is partly offset by the increased costs in food supplies. The apartment-house woman buys ready cooked foods as she comes home from the city, not thinking that one-third the amount would have served had she considered it her duty to stay in and prepare it.

A potent cause of the high cost of food, as well as of waste in edible material, is the recent and increasing demand for perishable foods.

The standard of "leisure" costs much. To putter all day over cooking such materials as take time is relegated to the workers.

Thrift is no longer inculcated as of old. It is easier and quicker to buy a new article than to repair the old.

Only the highest skill can save in the French fashion, and this requires training. Such training takes time and such skill means taking pains in each small detail.

There are wrong notions about food as to what is nutritive or economical. The cost of perishable meats, in distinction from dried, salted or smoked, is a case in point; fruit and vegetables are also expensive.

The wholesomeness of the monotonous fare of the fathers has been denied and the abundance of the modern table praised as evidence of our advanced civilization.

Education in food values and better cooking of standard foods may lead to a wiser expenditure.

#### ADVERTISING.

In the discussion of advertising as a possible element in the increase of prices, a distinction is to be made between the legitimate advertising that performs a useful function by informing the public concerning the merits of commodities and the wild-cat advertising that is designed to exploit the public.

The advertising in periodicals falls into two classes: magazine advertising and newspaper advertising.

Undoubtedly, advertising is a paying proposition from the point of view of the individual business man, or it never would have extended to its present proportions.

While recognizing the many benefits arising from advertising the fact cannot be obscured that the consumer does pay the bill, and that the bill has grown to enormous size in recent years. It is one of the many forms of waste in the distributive process.

The reduction of waste in this field would help to bring prices back to a lower level.

## WASTE FROM FIRE.

Fire waste is disproportionately large in this country. This waste is an absolute destruction of property. The belief is common that the insurance companies pay the loss if the loser is fully insured. This is a false idea. The insurance company is nothing but a clearing house, receiving money from many and distributing it among a few.

The loss from every fire comes back to the people, and they pay every cent of it in rent and taxes, in the food they buy and the clothes they wear.

In addition to the huge waste by fire in this country there is another phase of the cost to the people shown in the expense of maintaining fire departments in all cities and towns: the cost of enforcing building laws; the expense of insurance companies with their adjuncts of inspection bureaus, rating organizations, etc.; and part of the expense of water-works systems. All these items are charged back to the public.

As in other items of waste, the total is found to be stupendous.

The cause to a large extent is wooden buildings, poor construction and national carelessness.

Such a loss as that suffered by fire is certain to have its effect in the increased cost of commodities, and demands a remedy. The remedy is largely with the people themselves.

Extracts from an address by Mr. Franklin H. Wentworth, secretary of the National Fire Protection Association to the Canadian Manufacturers' Association, containing excellent suggestions on the subject, is submitted herewith as Appendix No. 17.

## UNPRODUCTIVE EXPENDITURE.

In weighing the causes that have contributed to increase the cost of living, this board is convinced that a far-reaching influence in perpetuating high prices is unproductive expenditures on armies, navies and on national and local services which are not reproductive.

The diversion of labour and capital from productive industry to waste and destruction, with the accompanying diminution of the necessities of life and an inability to supply the world's demands, inevitably resulted in an advance of the prices of the commodities of common consumption.

The effect of lavish public expenditure is contagious and is sure to result in private extravagance as well. Our tendency has been towards growing extravagance in both private and public life.

It is recognized, of course, that much of this unproductive expenditure for national defence and government services are unavoidable under existing conditions. Yet it is undeniable that public opinion has been all in the direction of spending money on every conceivable object and it has not been sufficiently alarmed to devote its thought towards economy and the reduction of expenditure.

Experience in the stern school of adversity may yet exert an influence in modifying this tendency. No other school appears to have much influence in this direction.

## VIII.

## UNECONOMICAL HOUSEHOLD EXPENDITURES.

## (1) PACKAGE GOODS AND SHORT WEIGHTS.

The consumption of various food products specially prepared and distributed in packages of various sizes has increased enormously of late years.

While these packed goods are attractive, convenient and wholesome, they undoubtedly, as a rule, cost more to the consumer than does the same quantity of food pur-



chased in bulk. The consumption of package goods makes for increasing comfort, pleasure and luxury in the household, but it adds heavily to the expense of living.

The practice of buying package goods, instead of purchasing the same food products in bulk, involves a threefold addition to cost:—

(1) The buyer has to pay for the extra cost of fancy packing and of distribution in small quantities.

(2) As most of the package goods are heavily advertised, the consumer has to pay for this expense.

(3) The packages are in many instances short in weight, so that the purchaser usually pays higher for the food value that he obtains than if he bought in bulk. While the buyer thinks he is buying by the pound, the seller is really selling by the package.

The following list of retail prices is the result of an inquiry made by one of the food inspectors:—

Kind of Food.	Cost per pound.	
	Bulk.	Package.
	cts.	cts.
Rolled oats.....	4	7
Cream of wheat.....	4	10
Gem meal.....	4	10
Corn meal.....	3½	5
Puffed rice.....	10	15 cts. for 6 oz.

In the case of staple commodities, such as flour, the package system has been carried to costly extremes in towns and cities. Formerly, flour for the household was usually bought in barrels; then the half-barrel came in; then the quarter-barrel, followed by further subdivisions until now the sale of flour in 5-pound packages is quite general.

In defence of the package goods, it is contended that this method of bringing goods to the consumer is more convenient and sanitary than the method of bulk sale.

Undoubtedly the package method has an advantage in its favour in the matter of cleanliness and neatness.

It is not implied here that the consumption of package foods should be discontinued altogether and the old method of bulk purchase adopted exclusively. Consumers, however, should be made acquainted with the facts in connection with the purchase of package foods which reduce the amount of food value received for a given expenditure of money.

When the packed food-stuffs were first put upon the market, purchasers usually inquired concerning the weights or contents, as they had been accustomed to buying by weight. As the package method became established, customers ceased to take this precaution. This opened the way for a general reduction of the size of the packages by manufacturers. It is a well known fact in the grocery trade that the sizes of package goods have been decreased in many instances, while the purchaser has not been informed concerning this reduction.

Various remedies have been suggested for the abuses that have crept into the system of retailing goods in packages. One measure of protection which each consumer can apply for himself is to make inquiry concerning the weight and quantity of goods in packages, and to check up the results by weighing and measuring at home.

Home weighing would bring to light any shortage or deceit that might be practised, and would show the comparative economy of the purchase of goods in package or in bulk.

It is desirable, in the opinion of this board, that packages containing food products should be required by law to be labelled distinctly with a statement giving the net contents, in terms of weight measure or numerical count of goods, when they were packed.

Attention is directed to a memorandum on this subject by Mr. Way, Chief Inspector of Weights and Measures, submitted as Appendix No. 14.

## (II) RETAIL DELIVERIES AND THE TELEPHONE.

The introduction of the telephone, while a convenience in many ways, cannot be regarded as conducive to thrift or economical expenditure in the ordinary households in towns and cities. The facilities provided by the telephone lead to demands for frequent deliveries of parcels of small value at irregular times. This adds immensely to the cost of deliveries all along the line.

## (III) MEDICINAL PREPARATIONS.

Apparently medicinal preparations put up in "package" form, and sold under copyright names, are much higher than the same goods under their chemical name in bulk, as shown by the following statement:—

RETAIL PRICES of drugs as sold under copyright names and under chemical and trade names.

Copyright Name.		Chemical Name.	
Aspirin.....	\$0 60 per oz.	Acetylc Salicylic Acid.....	\$1 75 lb.
Aristol.....	1 80 "	Thymol Iodide.....	0 53 oz.
Phenacetine.....	0 33 "	Acetylphenetidine.....	1 25 lb.
Duotol.....	1 50 "	Guaiacul Carbonate.....	0 40 oz.
Europhene.....	1 80 "	Iodobutylcresol.....	1 25 oz.
Iodothyrene.....	3 40 "	Thyroidine (Merck).....	1 30 oz.
Pyramidon.....	1 50 "	Aminopyrin.....	0 85 oz.
Selophen.....	1 00 "	Acetylamidosalol.....	0 50 oz.
Tannigen.....	0 80 "	Diacetyltannin.....	0 45 oz.
Tanalbin.....	0 85 "	Tannin Albuminate.....	0 45 oz.
Verinol.....	1 60 "	Diethyl Barbituric Acid.....	0 75 oz.
Verinol Sodium.....	1 60 "	" Sodium Salicylate.....	0 75 oz.
Diuretin.....	1 75 "	Theobromine Sodium.....	0 35 oz.
*Aminoform.....	0 60 "	Hexamethylenamine (or Formin).....	0 85 lb.
*Cystogen.....	0 85 "	" " ".....	0 85 lb.
*Hexamine.....	0 30 "	" " ".....	0 85 lb.
*Urotropin.....	0 60 "	" " ".....	0 85 lb.

\* And several others, all being copyright names for what in the trade is known as Formin.

## IX.

### RENTS, HOUSES, TOWN PLANNING, PUBLIC UTILITIES, LAND SPECULATION, LAND TAX.

Rent is one of the large factors in the cost of living. The classes having the smallest incomes have the largest proportional expenditure for rents. Thus rent is not only one of the largest items in the family budget but its weight falls heaviest on those whose incomes are least able to bear this burden.



The increase in rents is due largely to the following causes (apart from over-speculation in real estate):—

1. The increased cost of building material.
2. The increased cost of labour.
3. Higher standards of construction fixed by more stringent building laws.
4. General demand for conveniences which a few years ago were luxuries.

The opinion was very generally expressed by representative workmen that in the cities the organized efforts to provide comfortable homes for workingmen at low rentals were progressing at a very slow rate.

The working people of to-day demand and are justified in demanding better habitation than they had twenty or thirty years ago.

Housing is unquestionably the most important of all home conditions, and it is naturally one to which increasing attention is directed in all western countries. This is due to the growing knowledge of sanitation and recognition of its influence on health.

The advantages of the English Cottage System for workmen's houses—in space, air, light, and having “the place to yourself” where practicable—outweigh many other considerations.

The proper housing of the working classes is of the greatest economic importance to the community, and this is only one of the important considerations involved. The science of economics cannot treat men as mere machines. It must not be forgotten that they have senses and minds and souls.

Mr. G. Frank Beer, of Toronto, contributes the following memorandum on this subject, under date of January 15, 1914:—

“I have pleasure in giving you the result of my own experience and observation.

(1) Apartments rented in 1900 at \$30 per month, now bring \$40 per month in face of a very large increase in the number of houses.

(2) Houses rented in 1906 at \$30 per month now bring \$40 per month, showing an increase corresponding with the previous instance.

“These illustrations are in districts in which no new development has taken place to affect the values. They may, therefore, be considered as fairly representative of the general increase in rents during the past ten years.

(3) Building land offered me at \$12 per foot, three years ago, is now selling at \$35 per foot.

“This is partly accounted for by the improvements since made in the district. Building land corresponding to that offered me at \$12 per foot three years ago, is now bringing \$25 per foot. By ‘corresponding’ I mean land with equal transportation facilities and equally near a thickly settled district. The normal growth in land values has been increased by an unusually rapid growth of population. It has also been artificially increased by the cornering of land in the suburbs by real estate agents and speculators.

(4) Office rents show the same percentage of increase within the same period.

(5) Houses occupied by wage-earners and artisans show the most marked increase of all in rentals. The increase in this class of houses approximates 50 per cent.

“In Toronto this is accounted for by several facts. The increase in the price of land has made the construction of small houses less profitable than formerly. The result is that few houses have been constructed to rent at from \$12 to \$15 per month. Another factor contributing to the increase is the lack of rapid transportation

facilities. The workmen occupying these houses must be at their place of work early in the morning, and as transportation is slow there is an abnormal demand for houses located near the heart of the city. A further cause of increased rents which applies to this class of building is more severe Housing By-law restrictions. The effect of these, unfortunately, is to discourage the construction of cheap houses, and to some extent place a premium upon the rent value of existing cheap houses. Other causes of higher rents which apply to all classes of building are: increase in cost of labour, owing to higher wage and shorter hours; higher cost of lumber, owing to its growing scarcity; and high cost of building material, owing to the local demand being fully up to, if not in excess of the supply.

"It is my conviction that one basic cause of the large increase in rents is the absence of wise city planning. Added to this is the misfortune that the administration of cities in Canada, as elsewhere, is largely in the hands of those who have no special training or qualification to deal with problems that are taxing the mature experience and best talent of European cities. The result of this is a waste which is very serious. Public services are planned and installed at large expense, which a few years later are found inadequate and useless. The waste in this respect alone must amount to a sum very imperfectly appreciated. Lack of foresight in acquiring land required for public purposes is another source of waste. In Toronto many millions of dollars have been wasted in this respect. True, the advantage has gone to individual owners of land which has been bought for city purposes, at greatly increased, if not highly inflated prices, but the cost to the community is a permanent charge.

"A further illustration of the need for city planning is shown in the matter of transportation. We have no rapid transportation. It takes longer to travel from one part of Toronto to another, than to go from Toronto to Hamilton. One other illustration of the need for city planning, an illustration which is possibly the most important of all, is the lack of laying out of the surrounding territory so that the natural and inevitable growth of the city may be rationally and economically guided. In Toronto huge sums have been paid for street paving, sidewalks, sewers, water supply and electric light facilities, in advance of existing requirements. Instead of the growth being reasonably centralized, it is widely scattered, causing an increase in fire protection, police protection and other public services upon a wasteful scale. All of these wastes ultimately effect the cost of living and the cost of rents.

"You will see by the above that I am, therefore, strongly of the opinion that no one cause in our cities generally is a larger factor in this problem than the absence of what is now described—for lack of a better name—as City Planning.

"It will be seen, however, that the interests of suburbs are equally involved in city planning. One of the objects to be accomplished is the rational linking up of the country with the city.

"The cost of housing is inseparably associated with the cost of land, and my study and judgment convince me that some measure of tax reform must be instituted. I am not a single taxer—it is not necessary to go to the extreme in order to advocate a wise mean. At one time I was chairman of the finance committee of a western city. We exempted improvements from taxation to the extent of 50 per cent, and the effect was decidedly steady upon real estate values."

The report of The Toronto Housing Company, Limited, 1913, together with press extracts in regard to model homes for workingmen are submitted herewith in Appendices Nos. 37 and 38.

The building of cities, towns and suburban subdivisions without any well-devised "town-planning" scheme has contributed to the cost of living in the way of wasteful and uneconomical expenditure.

This subject is now attracting public attention in some degree. Mr. Thomas Adams, one of the leading authorities on town planning, explains that:—

Town or city planning is the application of scientific principles to all matters connected with the town or city. The factors which constitute a city and the order in which they do so, are:—

- (1) Industry and external transportation.
- (2) Healthy living conditions for the citizens.
- (3) Internal transportation.
- (4) Markets and food supply.
- (5) Education.
- (6) Recreation.
- (7) Civic centre and monumental buildings.

The first essential in any city is its water supply, and complementary to that is an efficient system of sewerage and garbage disposal.

The first object of the town plan should be to conserve and provide for the extension of its business interests, and to apply healthy conditions to the dwellings of the people. The next is to secure efficiency in its transportation and in the supply and distribution of food, etc., and the third is to give expression to those interests which are represented in the sites provided for universities, schools, parks, playgrounds, town halls, churches, etc.

In this connection, it is apparent that the interest of the community should be best served by the public ownership of such public utilities as water, gas, electric light and street-railways in cities, towns and villages.

Over-speculation in Canadian real estate has been bad for the whole country, as a large part of the money which has been invested in this country has gone into this more or less unproductive class of security.

There has been a general desire to take advantage of a rise in price.

Business investments do not as a rule show a very quick turnover. The business has to be developed, and this takes time and money, but it builds up something which is of great importance to the whole community.

Subdivisions have been laid out so that the value of the land would be greatly increased. Some of these subdivisions will, no doubt, in due course be valuable, but it may be some time before they are even worth the price paid for them. While the boom lasted it was fairly easy to pass them on to some one else at a profit, and it was the fault of the last man if he got caught. The same money invested in business or production would have done infinitely more good.

When real estate is purchased at boom prices, the owners even to obtain a small percentage on their investment must secure a high rent; so that the cost of doing business is increased out of all proportion to the business being done.

The real estate speculator produces absolutely nothing. He gambles at the expense of a prospective tenant, and that tenant pays tribute in the form of increased rent and taxes.

The land speculator increases the price of farm lands in the neighbourhood of cities, and thus hinders the development of rural markets and adds to the cost of workmen's homes.

High values encourage unhealthy conditions and help to lower production by keeping large areas of good farming lands in idleness around the borders of our towns, and by attracting men off the land during the period of boom.

The taxation of "land values" is presented by its advocates as a remedy for many of these speculative evils.

A memorandum on this subject by The Single Tax Association is submitted herewith in Appendix No. 42 without expression of opinion thereon, however, by the Board of Inquiry, as the subject of direct taxation comes more especially under the legislation of the Provincial Parliaments, and as the theory in regard to the taxation of land values has not as yet undergone the effective test of practical experience, so far as we are aware.

## X.

## COLD STORAGE.

The use of cold storage in the preservation of food products, which has been developed greatly in recent years, has been connected in the popular mind with the recent advance in prices.

The popular idea as to cold storage is that it increases prices and that it menaces public health.

It is charged that prices have been raised by the action of food speculators in putting goods in cold storage and holding them there for long periods, thus creating a shortage of supply and forcing an artificial advance of prices.

It has also been charged that the public health has been injured through the consumption of food carried in cold storage, until it has become unfit for human consumption.

Impartial inquiry into the methods of cold storage leads, however, to the conclusion that the general principle is sound and beneficial.

It is a great advantage to be able to purchase perishable products when they are low and place them in cold storage where they will keep. If we had no cold storage and could not keep meat at all in that way, it would tend to raise the price, because there would be no way of doing it, except keeping the animals alive.

The cold storage process is simply the application on a large scale of the principle of food preservation, as used in the cellar of the farm, or the ice-chest of the home. The principle is the storing of food in the time of plenty for its later use in time of scarcity.

The effect of cold storage on prices is in general to make them steadier, preventing extreme fluctuations, either upward or downward.

The supply is reduced by the storing of products in time of plenty, and the price consequently does not fall so low. The supply is increased by the marketing of storage products in time of scarcity, and the price consequently does not rise so high.

Cold storage tends to increase production by extending the period over which perishable products can be marketed, and thus, of course, to lower the prices of certain commodities.

It is generally conceded that there takes place a change of flavour as a result of cold storage, but if the goods are properly handled there seems to be no danger to health. The effect of cold storage on quality differs widely for various commodities. For instance, cheese can be successfully preserved without deterioration of quality for a considerable period of time. In fact, curing or maturing in cold storage is strongly recommended. The storage period of butter is shorter; that of eggs is shorter still.

The length of time in which poultry can be kept in satisfactory condition appears to be variable.

The popular idea as to the great quantities of products held in cold storage in Canada seems to be in error.

Information has been obtained by the Board and compiled showing the products stored in these plants throughout the Dominion at the beginning of February, 1914, from which it would appear that the quantity in storage at that period was not in excess of the reasonable requirements of the people.

The table so compiled is set forth below:—



TABLE OF COMMODITIES in cold storage at the beginning of February, 1914, in all plants in Canada.

Commodities.		Quebec and Maritime Provinces.	Ontario.	Manitoba and West.	Total for Canada.
Meat.....	Lb.	4,536,227	14,764,582	20,573,330	39,874,139
Poultry.....	"	552,621	357,924	1,397,481	2,308,026
Butter.....	"	3,047,431	1,207,410	1,385,465	5,640,306
Cheese.....	"	796,110	447,140	210,157	1,453,407
Fish.....	"	1,806,763	330,491	6,583,624	8,720,878
Apples.....	Brl.	18,920	12,637	5,838	37,395
Eggs.....	Doz.	9,240	33,056	14,385	86,681
Canned goods.....	Gal.	7,560			7,560
".....	Cases		75,620	1,575	77,195
Evaporated Apples.....	Brl.	78			78
".....	Lb.		277,650		277,650
".....	Cases		1,500		1,500
".....	Boxes		50,000		50,000
Other Fruits.....	Brl.	71			71
".....	Lb.			7,292	7,292
".....	Cases			1,663	1,663
".....	Boxes	23,384	965	2,904	27,253
Vegetables.....	Brl.	659	90		749
".....	Crate		150		150
".....	Sacks			10	10
Lard.....	Lb.	9,000	95,970	309,557	414,527
Pork stuffs being cured.....	Tierces	2,000			2,000
Frozen eggs.....	Lb.		78,620		78,620
Honey.....	"		11,000		11,000
Grape juice.....	"			5,730	5,730
Casings.....	"			3,000	3,000
Sauer Kraut.....	"			6,235	6,235
Milk.....	Cases			20	20
Rabbits.....	Lb.			2,400	2,400

Many people do not understand the meaning of these figures. Some of them seem so large that strange arguments are advanced and wrong conclusions drawn. The meat in storage in February, 1914, would supply 250,000 Canadians for one year—about 3 per cent of the entire population. In all the cold storage warehouses there was barely enough at that time to supply the city of Toronto for six months.

The butter was  $2\frac{1}{2}$  per cent of the year's product. There was about  $3\frac{1}{2}$  pound of butter for every family in Canada.

The cheese represented less than 1 per cent of the year's production.

The eggs would not be enough to allow one egg to every family. The number of eggs was low because of the steady winter demand. It would not pay to hold them much longer, and, furthermore, they would soon become unfit for use.

The charges for cold storage are not uniform throughout Canada. Variations in storage rates are shown in Appendix No. 11 to this report.

The Board is of the opinion that cold storage warehouses should be subject to federal inspection and also to inspection by health officers.

Chapter 85, Revised Statutes of Canada, provides for the inspection and sale of certain staple commodities.

The Cold Storage Warehouse Act of 1914 (as per copy in Appendix No. 12 hereto) provides authority for the supervision of all cold storage warehouses.

The following documents are submitted herewith, viz:—

Appendix No. 8.—Memorandum on the Cold Storage Industry, by Mr. J. A. Ruddick, Dairy and Cold Storage Commissioner.

Appendix No. 9.—Memorandum on Cold Storage, by W. R. Ingram, of the Swift-Canadian Company, Winnipeg, Man.

Appendix No. 10.—Cold Storage, by Frank G. Urner, Editor, New York Produce Review.

## XI.

### MONOPOLIES, INDUSTRIAL COMBINATIONS, MERGERS AND TRUSTS.

It is impossible from the information acquired by the board to measure the extent, as expressed in percentages, to which trusts, monopolies and combines have raised prices in Canada, but there is no doubt that some prices have been appreciably raised at times through the operations of these bodies.

Trade combinations on this continent were, in the first instance, adopted for the purpose, amongst other things, of eliminating unnecessary expenses in the cost of manufacture and distribution, and were this the sole object of such combinations the consumers would have benefited, as all improved services, such as labour-saving machinery, cheaper transport, railway, postal, cable and telegraph services are distinctly beneficial to the whole community. Many industrial combinations are not trusts in the sense of being organized for the purpose of controlling prices in restraint of trade, but by reason of manufacturing or controlling a large percentage of the output, they are able to exercise some control over prices.

It is a comparatively easy matter for a few wealthy individuals, in any given industry or business, to secure substantial control of the output by consolidation of capital, or by unwritten understandings.

It is admitted, however, that associations may be legitimately formed so as to regulate industry, that it may become more profitable to those in whose interests it is regulated. One would not condemn, for instance, a combination of traders who buy in concert in order to obtain maximum discounts, cheaper transportation and other legitimate objects of a like nature, such benefits being passed on to the consumer.

Combinations regarded as specially reprehensible are those formed in any branch of trade not merely fixing selling prices, but bringing pressure to bear on suppliers to refuse goods to independent traders, who do not conform to their selling conditions.

Documents have been examined by the Board of Inquiry indicating that prices or other agreements are to some extent in vogue, which may contravene the provisions of the Combines Investigation Act, in respect of certain articles that are the subjects of trade and commerce. It did not appear, however, from any information obtained by the Board, that these restrictions had any effect in enhancing prices materially to the consumer.

A copy of the Combines Investigation Act, under which such cases may be dealt with, is submitted for reference in Appendix No. 13.

Trusts and industrial combinations are generally understood to mean great corporations whose operations are conducted on a large scale. There may, however be local combinations which have possibly a more considerable influence upon the cost of living than the larger combinations. There do not appear to be any trustworthy statistics available, to prove the extent of such influence by local combinations.

During the last few years more, perhaps, has been said regarding the increased cost of living from the increased price of meat than about any other cause.

It has been popularly supposed that for a number of years the large packing houses in Canada have controlled the price of meats and likewise the price of cattle and hogs.

We do not find that there has existed any combination in restraint of or affecting trade in cattle, sheep or meat in Canada, such as would infringe on the laws of the Dominion.



The conditions, however, seem to have developed in some respects to a semi-monopoly, semi-trust condition, with competition largely eliminated as a regulating principle.

There are six large packing houses operating in Canada, viz.—

Matthews-Blackwell, Limited; head office, Toronto.

The William Davies Co., Ltd.; head office, Toronto.

The Harris Abattoir Co., Ltd.; head office, Toronto.

Gordon, Ironsides & Fares Co., Ltd.; head office, Winnipeg.

The Swift-Canadian Co., Ltd.; head office, Winnipeg.

P. Burns & Co., Ltd.; head office, Calgary.

The causes contributing to the increased prices of meats are dealt with in the chapter on live stock, meats and dairy products. We do not find that in the past the causes are chargeable to the operations of the large packing houses.

Combinations of capital in their very nature make for economies in production by placing the control of the business in the hands of a few individuals, and thus reducing general expenses; they also reduce materially the cost of distribution by enabling products to be distributed from the nearest producing point, and they are able to maintain or steady prices.

The statement has been made by witnesses engaged in slaughtering cattle that all the profit they would ask would be the value of the by-products, which they are not able to utilize, but which the large packers are able to dispose of.

While industrial combinations may result in economies of production and distribution, the fact that competition is either wholly or partly removed, may lead to abuses.

Under fair competitive trade the best and most economical methods of distribution from the producer to the consumer should succeed, with benefit to the whole community.

In order to aid in securing effective competition in the purchase and sale of cattle, hogs, sheep and meat, the most favoured remedies which are mainly in line with the recommendations of the Manitoba Beef Commission, 1907, are as follows:—

(1) That the necessary steps be taken to encourage a more equable marketing of live stock by the farmers, preventing overmarketing and under-supply at different times of the year. Representations have been made to us that if the supplies could be so arranged as to come on the market in a more regular manner the companies now in operation could care for all the meat products to the advantage of both producer and consumer. This we consider of the very highest importance looking to the future of the live stock industry and in the interest of the consumer in that it will steady prices. It is a matter that may well receive the most earnest attention and one in which the Government, the meat companies and the live-stock producers may co-operate.

(2) That a public market and abattoir with cold storage under proper regulations and management, be provided in each large centre as fast as the trade will justify.

(3) That the railways should provide Union Stockyards, under independent management, when justified by the trade.

#### CAPITALIZATION.

Regarding the relation of capital stock of joint stock companies and of industrial amalgamations, to the cost of the commodity to the consumer, the following statements are made by Mr. Fred. W. Field, Managing Editor of *The Monetary Times* of Canada:—

The relation of the capital stock of joint stock companies, to the price paid by the consumer for commodities has been the subject of little complaint. The chief exception is in regard to industrial amalgamations. The corporations represented by the

words "merger", "combine" and "trust" have generally come into disfavour with the public. This may be ascribed partly to the abuses of trusts, particularly in the United States, to the occasional regulation of prices to what is regarded as too high a level, and to the failure or reorganization of many industrial amalgamations, particularly in Canada.

The most common charge is that the industrial combine dictates throughout the country the price of the commodity it sells. This is not necessarily so, simply because the combine is a combine representing a group of allied industries under one management.

The other charge is that the average industrial combine is over-capitalized and therefore having what is commonly known as "watered stock" is placing improper burdens upon the consumer.

It should first be made clear that unless an industrial merger or trust has a monopoly, or practically so, in its own sphere of business it cannot easily, if at all, dictate prices with any success. Suppose a merger is formed with the idea of securing a monopoly. It can fix prices with sole regard to the welfare of its promoters, directors, management and shareholders only until competition appears. If the would-be monopoly is selling an article at thirty cents and independent companies are selling a similar article at twenty-five cents or less, there are apparently only two alternatives: (1) to force the competitors out of business or (2) to meet the competition by reducing prices.

The experiences of recent years in Canada have proved that it is not by any means an easy matter to eliminate all competition. The industrial amalgamations which can claim truly to have a monopoly in Canada are comparatively few.

There are several limitations to the freedom of monopolies, such as, for instance, the power which consumers possess of substituting other goods for those monopolized; the danger of monopoly exciting new competition; and the decreasing sales that frequently accompany increasing prices. These help to confine the profits of many monopolies within fixed limits.

Some industries are natural monopolies and others may exist because of defects in the law. The contention is often made that the charges exacted and the service rendered by natural monopolies should be controlled by the government and that monopolies created by defective laws should be attacked through such laws revised. Another contention is that in every industry in which free competition is permitted by the government, the government should enforce fair competition. The prices of many commodities are undoubtedly affected by monopolies in basic materials, and it would seem that it is in this direction that the high cost of living can in any well defined way be ascribed to joint stock companies, whether "over-capitalized" or not.

The industrial amalgamation in Canada as a financial and economic factor has been strikingly unsuccessful. The life of what may be termed "the merger movement", which extended notably over the years 1909 to 1912 inclusive, was so short in the aggregate, and still shorter in the case of many individual amalgamations, that it had little opportunity to operate as an economic factor of importance in relation to cost to consumers. This refers to the movement generally, there having been several individual exceptions to the rule.

The number of industrial mergers negotiated from January, 1909, to January, 1913, was fifty-six. The aggregate authorized capitalization, including bonds, of these mergers, was \$456,938,266. The fifty-six amalgamations absorbed 248 individual companies. The aggregate capitalization of 206 of these individual companies was approximately \$167,289,182, which amount in various ways was increased upon amalgamation. The forty securities issued to the public, resulting from the amalgamation movement, totalled \$57,346,666. With sixteen of these, amounting to \$16,500,000, an aggregate bonus of \$6,750,000 was given.

These figures representing authorized capitalization are very large, but they have

not so much significance as might at first appear. The most important figures are in regard to capital actually subscribed and paid-up. This information is somewhat difficult to obtain. Even allowing for the fact that the above figures represent authorized and not paid-up capital, and allowing for money required for extensions, reorganizations, new factories, etc., one may safely conclude that a proportion of the securities issued by the mergers generally in Canada has been watered stock.

A large number of industrial amalgamations of recent years have met failure, many have had to undergo drastic reorganization and many have had to defer dividends on bond and stock issues. The history of what we have termed the merger movement is, briefly, a comparatively short craze with the object of combining corporations in many lines of business, followed by long list of failures and reorganizations and consequent disappointment to investors. Had this merger movement, in the aggregate, been successful, eliminating competition and creating monopolies in various lines, the effect upon the cost of commodities to the consumer must naturally have been marked. As it is, the movement having been unsuccessful, competition has not been strangled; monopolies with a few exceptions, have not been created, and the investor has had to bear losses in connection with his investments. The craze for merger making appealed to many promoters as an easy means to acquire wealth. From a study of the available figures, it would appear that this was done. In many cases, however, the amalgamations by no means proved as successful as the promoters and the participants apparently anticipated. The experiences of the past few years will probably prevent any such financial carnival during the next few years, while the memories of investors are green.

Among the objects and advantages to be gained by consolidation, the following were cited by promoters during an investigation into the matter conducted by *The Monetary Times*:—

The standardization of brands.

Elimination of needless competition.

Obtention of further working capital.

Prevention of increase in prices to the public.

To keep pace with the growing market demand.

Elimination of a large amount of freight charges.

Savings from the concentration of the executive force.

Economies in the purchasing, manufacturing and selling departments.

The obtention of branches of the one company in various parts of the country.

Specialization of various plants, dispensing with unnecessary duplication of output and patterns.

During the period when the formation of industrial mergers was most in evidence, it was repeatedly asserted as an undeniable fact, that there would be savings effected from the concentration of executive forces and economies effected in the purchasing, selling and manufacturing departments. On that assumption and on past earnings of individual companies, profits of the combined companies were chiefly estimated. In a large number of cases, the actual profits of the combine were a long way short of the amount estimated. Consolidation in itself, by no means guarantees economies as compared with the individual operation of plants, nor does it guarantee larger profits than earned by the individual plants. The question of management in this connection is important as is also the question of capitalization and the natural difficulties confronting the welding of individual plants into a manufacturing unit.

The factor of over-capitalization and watered stock enters also into the discussion of joint stock companies generally. According to a compilation made from the Federal Government and the Provincial Government official *Gazettes*, there were incorporated in Canada by these Governments in the calendar year 1912, 4,651 new



companies with total authorized capitalization of \$1,245,927,701; and in 1913, 4,178 new companies with total authorized capitalization of \$992,943,949. These figures of capitalization naturally may mean anything, as here again enters the difficulty of knowing how much of this authorized capital has been issued and paid up.

To ascertain the extent of watered stock, if any, would entail an expert examination of the financing, the assets and general position of the companies individually, —an Herculean task.

It seems a fair assertion that unless a corporation has a monopoly or unless there is a price agreement between several corporations, prices to the consumer cannot be regulated to a high level with any success.

Coming to the merits of the second charge "over-capitalization" and "watered stock", a close analysis shows that it is not the consumer of the commodity sold, who suffers, but the investor in the company's "over capitalization" and "watered stock." The bonus of common stock, manipulation of its price in the stock market, the roseate estimates of profits, glowing prospectuses, heavy capitalization, all may be financial sins, but if their operations are traced, they affect chiefly the promoters, the investors and their funds. As stated previously, mere "over capitalization" of a company would have little effect on prices, unless in some way the over capitalization assisted the company to become a complete monopoly, which is unlikely.

In Canada the words "over capitalization" have been used often in relation to those industries whose capital has been determined by their probable earning power rather than by their assets. The estimated income of the company—particularly if the merger is under the auspices of ambitious brokerage firms—has frequently been the basis of the capital calculations. A business which is thought to be able to earn \$100,000 net per annum, is said to be able to pay dividends on a \$1,000,000 capital when the rate of interest on other investments involving similar risks is, say, 10 per cent. So the company is capitalized at \$1,000,000 with little reference to the tangible assets. But even this method of computing capital scarcely affects the consumer. In the example above taken, assume the assets to be worth \$600,000, the paying of \$1,000,000 capital into the treasury of the company, does no harm if all other operations are honestly and capably managed. For there will be \$400,000 cash assets then belonging to the company in addition to the other assets, whether fixed or circulating, which have been purchased to the amount of \$600,000. Legitimate income can be earned on the \$100,000 as well as on the \$600,000, assuming that the number of workmen, or working units, are increased in proportion to the capital; or if the capital is suitably re-invested until actually required by the proper expansion of the business.

But even if, through dishonest promotion methods, excessive amounts are paid for tangible assets, for patents, good-will or promotion services, and the shareholders receive for their \$1,000,000 only \$600,000 assets, with little or none of the \$400,000 cash left in the company's treasury, even then the company cannot be said to have been "over capitalized." It has simply been "milked"—in plain words, robbed.

The above example assumed the actual payment of \$1,000,000 capital into the company by the shareholders. It supposed that stock had been issued at, say, par value (\$100) to the extent of 10,000 shares. Had this same company possessed or purchased assets with an actual value of \$600,000, and had it issued 6,000 \$100 preferred shares and 4,000 \$100 common shares; and had two shares of common stock been given away with every three shares of preferred stock sold—the company would still have \$1,000,000 nominal capital, but would be liable in no way to suspicion of over capitalization, because only \$600,000 would be paid capital, the \$400,000 common stock being of no present value. The issuance of common stock having no present value is not in itself an act of wrong-doing. The common stock merely represents an agreement between the shareholders and the promoters that the shareholders will share in any future increased earnings of the company—the foundations for which were laid by their paid capital contributions—in proportion

to their holding of the common stock. 'So long as it is recognized that such common stock simply represents "future hopes" and has no present value (though some persons with betting proclivities might be willing to buy it as a speculation), the common stock is harmless. Moreover it is a method of making proper adjustments that is frequently invaluable to the most honest financiers. But in the hands of dishonest persons, common stock is frequently a dangerous tool. Through the medium of stock exchanges, wash sales, publicity campaigns and misrepresentations, the common stock is raised to an unwarranted "price" and foisted upon investors.

In issuing common stock as a bonus or otherwise, as in securing more capital than is represented by the assets possessed, no wrong is necessarily done. In both cases the wrong may be created later by dishonest financial methods. The regulation of these dishonest methods is another matter.

To return to the main theme—the effect of over capitalization on prices of commodities. The manager who is left in charge of the destinies of a "milked" company will likely find difficulties in earning dividends on his paper capital. If his company were "over-capitalized" but not robbed, probably he would have no such difficulties. But the manager who must earn \$100,000 dividends with \$600,000 assets, when he should have \$1,000,000 assets to earn dividends of that amount, is in trouble. The popular theory is that he sails smoothly out of the troubled waters simply by raising the prices at which he sells his factory's product—thus increasing the high cost of living. But he cannot solve the problem so readily. The experience of many of Canada's industrial mergers of recent years prove that he cannot. Assuming that his "over-capitalization" firm is not a monopoly, he cannot raise the prices much, because his competitors would undersell him and he would soon have to meet their prices again, or give greater value in quality for the increased prices he asks, or "reorganize" his merger.

The "over-capitalization" is not likely to make his firm a monopoly unless it has supplied him with so much surplus cash that he can crush competition. This is not only likely to be prevented by the Dominion Government's "Investigation of Combines Act", but competition, in Canada at least, has been hard to crush. No sooner does the field seem barren of competition than a dangerous new rival arises to take advantage of the apparent opportunity.

"Over-capitalization" seems therefore to create burdens for the investor as such (a problem outside the scope of the present inquiry), not affecting the prices to the consumer.

FRED W. FIELD.

TORONTO, February 11, 1914.

## XII.

### LUMBER AND OTHER BUILDING MATERIALS.

During the period since 1890-99, bricks have gone up 60 per cent, and lime has advanced 40 per cent, while cement prices have been reduced by nearly 50 per cent.

During the same period, manufactured lumber and wood products have increased in price from about 25 per cent to 50 per cent—due principally to higher wages, increased operating costs in lumber camps, enforcement of stricter regulations, exhaustion of supplies of largest trees, and to waste by forest and other fires.

The waste of natural resources by fire is a question to which special attention has been directed by the Commission on Conservation.



## XIII.

## CLOTHING.

To investigate comparative prices of clothing is a task of much difficulty. Fashions change and in the matter of fabrics and other materials experts often disagree.

The advance to the consumer has generally been felt in inferior goods for the same money, since there is a strong tendency in the retail clothing business to maintain certain price standards.

In cotton-wool goods the advance is felt in greater proportion of cotton and less proportion of wool for the same money, or in lighter-weight fabrics.

The all-wool garments are of lighter weight for the same money, or higher price. In cotton garments the situation is similar to that of woollen garments.

The advance in clothing since 1897 is estimated at from 30 per cent to 40 per cent, due to increased cost of production, in materials, wages, rents, etc.

The following statements furnished by a large wholesale firm manufacturing clothing, show the rise in prices for material and for labour from 1900 to 1913 in a few lines:—

Garment.	Material.	Year 1900.		Year 1905.		Year 1913.	
		Price per yard.	Selling price of garment.	Price per yard.	Selling price of garment.	Price per yard.	Selling price of garment.
Overcoat.....	Beaver.....	.85	7.50	1.00	8.00	1.10	10.00
" .....	Melton.....	.85	7.50	1.00	8.50	1.10	10.00
" .....	Frieze .....	.90	7.50	1.00	8.50	1.10	10.00
Suit.....	Serge.....	2/3	7.00	2/6	7.50	3/	8.50
" .....	" .....	3/8	10.00	4/1	11.00	4/4	12.50
" .....	Tweed.....	1/11	6.00	2/2	7.25	2/5	8.00
" .....	Fine Worsted.....	3/8	10.00	4/-	11.00	4/6	12.50
Linings .....	Body Lining.....	10d.	.....	1/-	.....	1/3	.....
	Sleeve " .....	7d.	.....	8d.	.....	9d.	.....
	Canvas.....	3d.	.....	4d.	.....	5d.	.....

## LABOUR.

	Year 1900, Per Week.		Year 1905, Per Week.		Year 1913, Per Week.	
	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.	\$ c.
Cutters.....	12 00	- 14 00	14 00	- 15 00	18 00	- 20 00
Pressers.....	8 00	- 10 00	12 00	- 14 00	15 00	- 20 00
Machine Hands, Male.....	9 00	- 12 00	13 00	- 15 00	15 00	- 25 00
" " Female.....	3 50	- 6 00	6 00	- 8 00	10 00	- 12 00
Hand Sewers, Male.....	8 00	- 10 00	12 00	- 14 00	15 00	- 20 00
" " Female.....	3 50	- 6 00	6 00	- 8 00	10 00	- 12 00
Hours of Labour, per week .....	60 hours.		55 hours.		49 hours.	

Another firm of merchant tailors submitted price statements as follows:—

	1890.	1913.
Laid down cost of Bellwarp serge, per yard.....	\$2.10	\$2.75
" " " Scotch tweed, " " .....	2.00	2.25

#### XIV.

##### LEATHER, RUBBER, BOOTS AND SHOES.

The prices of leather are approximately 40 per cent higher than in the nineties.

The constant addition in the cost of practically all the factors of production and distribution, as to leather and its various products, including boots and shoes, is the chief cause of the increased cost to consumers during the past decade.

The reasons as to the increase in price of leather since 1900 are stated by Mr. S. M. Wickett, of Toronto, as follows:—

1. Increased demand for leather for wars, automobiles, and new uses of leather, and general growth of demand.

2. I understand there was a very serious destruction of cattle and hides during the Russo-Japanese war.

3. **Falling-off in supply** of cattle on account of a couple of bad seasons and in increased cost of fodder.

4. Labour and tanning materials have all advanced 30 to 75 per cent.

5. The manipulation of the United States packers has frequently facilitated the establishment of a higher level of hide prices. This they were able to do by controlling a number of important tanneries in the United States. I understand that they control a very large proportion of the sole leather output of the United States and have a number of plants of light leather as well. When the market is more or less inclined to fall off or to hesitate they are able by filling up these plants to clear the market of floating supplies and give it the appearance of strength.

The following tables have been submitted as representing increases in standard lines of men's and women's boots (wholesale):—

	1897.	1907.	1914.
	\$ cts.	\$ cts.	\$ cts.
Men's Welts.....	1 90	2 35	2 65
" McKay.....	1 60	2 00	2 25
Women's Welts .....	1 50	1 85	2 20
" McKay .....	1 25	1 55	1 90

Rubber boots and shoes have increased in price at about the same ratio as boots and shoes of leather, and for similar reasons.

#### XV.

##### CEREALS, FLOUR AND BREAD.

###### WHEAT AND OTHER CEREALS.

No one claims that wheat is in any way controlled by any great corporation, although there have been certain times when, for a brief period, a partial corner of the market may have raised the price.

The price of wheat is determined by the supply coming from large or short crops in different parts of the world.

The changes in the prices of cereals both in the way of increase and decrease, seem to be no greater than might be expected from change in demand with the fluctuating general conditions of business.

## WHEAT IN CANADA.

Year.	Acres.	Yield per Acre.	Total Yield.	Average Price per Bushel.
		bushels.	bushels.	cents.
1910.....	8,863,151	14.89	132,049,000	75
1911.....	11,100,673	20.80	230,924,000	64
1912.....	10,996,700	20.38	224,159,000	62
1913.....	11,015,000	21.04	231,717,000	67
1914.....	10,293,900	15.37	158,223,000	

The above shows the average prices received by the farmers for all Canada, as compiled by the Census and Statistics Branch of the Department of Trade and Commerce. It will be seen that for the three crops of the years 1911-12-13 the farmers received a little under 65 cents a bushel.

All the evidence which we have gathered from many sources leads to the conclusion that under present conditions it costs about \$12 to produce and market the wheat from 1 acre. This includes interest on investment and allows the farmer average western wages for his work. At twenty bushels to the acre it gives us 60 cents as the average cost of producing a bushel of wheat in the three prairie provinces. This leaves a margin of 5 cents.

The above calculation is based on an average of 20 bushels per acre. It will at once be seen that the only farmers who really made money above their wages in growing wheat are those who produced in excess of 20 bushels per acre. When the crop dropped considerably below twenty bushels to the acre the farmer was not making even fair wages in the three years referred to. Further, this calculation does not take into consideration the fact that every bushel of wheat removed from the farm takes from the land soil material having a market value of 25 cents, which includes nitrates, phosphoric acid and potash, and the calculation is based on prices before the war.

When we take the national cost as well, the cost of placing the farmer on the land and the cost of enabling him to live and work where he is and all the contingent expenses undertaken by the whole people of Canada to put him where he is, it is very doubtful whether, during the three years 1911, 1912, and 1913 the wheat growers of the west were making much more than good wages. This must have had an important bearing on the question of the cost of living for all Canada, the concentration of an immense amount of labour on the production of one staple food, which, while so necessary, has not increased in price. The great importance of adding to wheat production by the introduction of live stock on an extensive scale is so important that it need not be enlarged upon. Exclusive wheat farming has been one of the important factors in increasing the cost of living for all Canada.

A memorandum from the Director of the Dominion Experimental Farms, concerning the cost of production of Canadian field crops, is submitted herewith as Appendix No. 21.

## FLOUR.

There are 1,100 mills in Canada for grinding cereals, of which 650 are "merchant" mills. These are sufficient to grind all the wheat and other cereals produced in Canada.

It is admitted that the larger mills have an advantage over the smaller mills, in being able to maintain uniformity in the product of flour for the Canadian market.

The large number of independent mills precludes for the present any effective combination for controlling the prices of wheat or flour in Canada—the prices being affected by world conditions.

Complaints have been made as to the higher prices being charged for flour in Canada than in the United Kingdom. The answer made to these complaints is, in effect, that only the highest grades of flour can be sold in the Canadian market, and that the quantity of such flour, produced from Canadian wheat, is limited, so that the consumer has to pay the price accordingly. What is left has to be sold in competition with the surplus products of the world.

The Canadian miller says that the English mills use a dozen different kinds of wheat and mix to obtain uniformity of product under world conditions as to price, consumers accepting intermediate grades of flour blended with flour of other quality, which could not be profitably marketed in Canada.

A consumer's and the millers' views on this question, as published in the *Canadian Miller and Cerealists* of June and July, 1914, are submitted herewith in Appendix No. 20.

Comparisons cannot be made fairly between the cost of bread in Canada and in England, because the flours are different, the loaves are different, and the costs of distribution vary greatly.

#### BREAD.

The price of bread varies in different towns and cities and the increase in the price appears to arise from the increase in wages, rents, factory operating costs, delivery service, including horses, feed, delivery vehicles, harness, etc. In recent years these increases have been quite marked.

There is no agreement as to cost of delivery in any two cities in Canada. The general estimate for delivery from house to house is 2 cents for a 3-pound loaf; wholesale or store delivery,  $\frac{3}{4}$  cent for 3-pound loaf.

Opportunities for economy in the production of bread are shown by experience at Aldershot, as reported in *The Statesman* of February, 1914, viz:—

“The Army bread is produced by a plant of the very latest type,” says *The Statesman*. “Labour is strictly economized, and the work made exceedingly pleasant. Altogether the Aldershot bread plant is in striking contrast to the manufacture of bread by unhealthy bakers' men working for small masters.

*Making army bread.*—It is probable that many of us would not greatly enjoy our daily loaf if we could witness its manufacture, and it is also probably true that in the interests of health a considerable proportion of existing small bread plants ought to be promptly closed. The Aldershot bread factory, on the other hand, using the best material with the latest appliances, can be witnessed with pleasure and even with enthusiasm, the process used is so economic, so cleanly and so clever.

But the product is even more remarkable for its cheapness and for its goodness. According to the Board of Trade *Labour Gazette* for December, the price of bread throughout England, Wales and Scotland averaged between 5.39 pence and 6.36 pence for 4 pounds, the average for the whole of Great Britain being 5.92 pence, or as nearly as possible sixpence per 4-pound loaf. The cost price of the Aldershot bread during the first half of 1912 came out at 8s. 6d. for 100 pounds, or as nearly as possible fourpence for the 4-pound loaf.



*One-third less cost.*—There is a comical side to this statement of plain fact. Think of the fuss that has been made in the United Kingdom during the past ten years about the incidence of a small corn duty and its effect upon the price of bread, and contrast it with the fact that a War Office, reputed to be particularly unintelligent, can manufacture bread for itself at one-third less cost than is paid by the public for an inferior product."

In Appendix No. 19 there is submitted a memorandum on the prices of flour and bread in various cities in the United Kingdom, Canada, and in the United States, by W. W. Moore.

## XVI.

### FISH.

The price of fish has not advanced to the same extent in recent years as products of the farm.

While fish are among the cheapest of food products, the consumption does not vary widely. The price depends on supply and demand. As the source of supply in the sea and inland lakes and rivers is abundant, the further development of the fisheries and the more extensive use of fish as an article of food should be of some benefit in reducing the cost of living.

The total marketed value of fish, fish products and marine animals, taken by Canadian fishermen from the sea and inland lakes and rivers during three years ended March 31, 1913, as stated in the fisheries reports, are:—

	Value.
Year ended March 31, 1911. . . . .	\$29,965,433
" " " 31, 1912. . . . .	34,667,872
" " " 31, 1913. . . . .	33,389,464

A booklet, issued by the Department of the Naval Service, Ottawa, Canada, on "Fish and how to cook it" is worthy of public attention.

The following extracts are taken from this booklet:—

In these days when the cost of living has become such an important factor, it is necessary for the average housewife to give careful thought to providing for her table. The articles procured must not only be reasonably cheap, but they must be palatable and nourishing.

As fish meets these requirements, attention is called to it as one of the articles that should daily have an important place on each bill of fare.

Not only from an economic, but from a health standpoint, is it desirable that fish should be much more freely used. Sir James Crichton-Browne, M.D., D.Sc., Lord Chancellor's Visitor, etc., in an article on the Value of Fish as Food, states that it cannot be too strongly insisted on that for working people of all classes,—those who work with their heads as well as those who work with their hands—fish is an economical source of energy necessary to enable them to carry on their work, and that for children and young persons it furnishes the very materials that are needed to enable them to grow healthy and strong.

The same authority states that another very important reason why fish should be generally used is its easy digestibility. Even feeble stomachs, that cannot readily deal with butcher's meat, find little difficulty in assimilating fish. The rapidity with which any kind of meat dissolves in the stomach depends largely on the fineness of its fibres. Thus beef is less digestible than mutton because the fibres are longer and harder, and again mutton is less digestible than the breast of fowl. In fish the muscle fibres are very short and are arranged in flaky masses, which are easily separated from one another. Hence fish lends itself to comparatively speedy digestion. Of course, fish differ greatly in



digestibility, the lean kinds being more rapidly disposed of than the fat, and salt fish, owing to the hardening of the fibre during salting, lingers longer in the stomach than fresh fish. Moreover fish is less stimulating as a food than meat, which is a matter of importance in these days of heavy nervous tension.

In this connection, however, an important feature must not be overlooked, viz., that as in other foods, the digestibility and nutritive value of fish largely depends on the cooking of it.

### COMPARATIVE VALUE OF FISH AS FOOD.

As is explained in "Recipes for Sea Foods", although foods are so different in appearance and taste, analysis shows that they are made up of a comparatively small number of compounds. These are water and the so-called nutrients—protein or nitrogenous materials, fat, carbohydrates and ash or mineral matter. Familiar examples of protein are the lean of fish and meat, white of egg, casein of milk and gluten of wheat. Fat is found in the fat of fish and meat, in milk (butter) and oils. Starches, sugars and woody fibre or cellulose form the bulk of carbohydrates.

Food serves the twofold purpose of supplying the body with materials with which it is built up and repaired and the energy for heat and muscular work. The value of food depends upon the amount of digestible nutrients it contains, and the cheapest food is that which supplies nutriment at the lowest cost.

Fish, like meat, is nitrogenous food. While it contains fat it is not a fertile or economical source of such, nor of carbohydrates. It should therefore, as a food, be supplemental to cereals and other vegetables, which, though rich in these elements, are deficient in protein.

Owing to the practically unlimited natural supply of sea fish and the unexploited supply of fresh-water fish in some provinces, it would appear that an increase in the home demand and the further providing of transportation facilities should result in a decrease in the retail price of fish. Several witnesses suggested that a greater endeavour should be made to encourage the supply of Canadian fish for Canadian people.

The Board of Inquiry has been favoured with a memorandum on the subject of steam trawlers and the fishing industry in the United Kingdom, by Mr. George S. F. Edwards, of Smiths Dock Company, Limited, South Banks, near Middlesbrough-on-Tees, England, through the courtesy of Major H. C. Blair. The memorandum is submitted herewith as Appendix No. 18.

## XVII.

### LIVE STOCK, MEATS, DAIRY PRODUCTS, ETC.

It is in the cost of farm products that the source of the higher level of prices is to be found.

The increase in prices being much greater on products coming directly or indirectly from the farm than on any other products, with the exception of forest products, it seems obvious that the main cause of the high price of food will be found by a study of agricultural conditions.

The price of manufactured articles does not show the same ratio of increase, new equipments having met the strain of higher wages.

Agricultural development has lagged behind industrial—science having been apparently less helpful, or less applied, on the farm than in the factory.

A feature of this situation is that the vast sums that have been paid on better communications and improved machinery are not always showing the expected result of an increased production at lower cost. The improvements in transport have been enormous, but they have had to be paid for heavily, and wherever they have been made the price of land has gone up.

The increased cost of live stock is due to under-production. The increase in cattle has not kept pace with the increase in population in the principal cattle raising countries, except Australia.

Farmers tell us they have found dairy work, and some other productions of the farm, more remunerative than raising live stock, and that these conditions have tended to a falling off in the supply of cattle.

### CATTLE AND BEEF.

On reference to the tables of commodity prices it will be seen that "western" cattle have risen from \$2.77 (1894) to \$6.77 (1913), the early quotations being for ranchers; while "eastern" cattle have risen from \$3.02 (1896) to \$6.99 (1913). Beef has followed, the rise in forequarters having been considerably more pronounced than in hinds, being from \$4.06 (1895) to \$11.75 (1913), or by *two and one-half times*.

The high cost of fresh meats by retail in cities is attributed in a large measure to the general demand for the "best cuts," heavy charges for delivery, telephone and other services, including the expense of "attractive" meat stores.

A large dealer in fresh meats furnishes the following information to illustrate this point:—

We deliver about 25 per cent of all purchases. From October 7, 1913, to November 3, 1913, 94,006 retail sales were made, of which over 23,000 were delivered to consumers.

Average value of each sale, 53 cents.

Average cost to deliver, 5-86 cents.

Average weight of parcels, 2 pounds.

One of the largest dealers in fresh meats, with store sales of nearly \$3,000,000 a year, gives the unit of store sales at 30 cents per customer.

The following comparative table showing annual per capita consumption of meats in Canada and Great Britain, Germany and France, is interesting:—

Annual per capita consumption in Canada, 175 pounds.			
"	"	"	Great Britain, 120 pounds.
"	"	"	Germany, 104 pounds.
"	"	"	France, 80 pounds.

The increased cost of fresh meats is, of necessity, borne largely by the more expensive cuts, on account of the great demand for them, and also for the following reason:—

The rise in meats is generally greater than the rise in live animals. This may be illustrated as follows: a live bullock weighing 1,000 pounds is bought by the butcher or abattoir at 6 cents a pound. The dressed carcass will weigh about 500 pounds. This carcass will be sold for \$60, or, as a rule, from \$55 to \$57.50 (11 cents to 11½ cents per pound). The abattoir must cover all costs and profits and the difference between the selling price of the carcass and the purchase price of the live animal by whatever can be made out of the offal. If the market price of the live animal should advance to 7 cents, the carcass would be sold for \$65 to \$67.50 (13 cents to 13½ cents per pound). In other words, 1 cent per pound rise in the animal on the hoof will mean 2 cents per pound in the wholesale price of the carcass. When the retailer divides the carcass and distributes the cost over the various cuts he will add the increase mainly to the better or higher priced cuts, so that every rise in the market of 1 cent for live weight may mean the addition of several cents to the more expensive cuts. It is upon those who insist on having only the best cuts that the increased price of live stock falls most heavily. Herein lies the advantage of knowing how to cook the cheap cuts.

The same statement applies to hogs and hog products. In good times the rough cuts are hard to sell and housekeepers generally do not know how to cook them.

STATEMENT No. 1.—Showing product; 48 Cattle, Lot N, Drover, Toronto; killed January 8, 1914.

24 steers.....	25,560 pounds.	Invoice.....	\$ 4,391 75	Cost about 9 cents per lb. live weight.
24 " .....	23,340 "	Freight.....	75 35	
	48,900 "	Killing.....	48 00	
			\$ 4,515 10	

Less.

Tripe,	583 pounds at 5 cents.....	\$ 29 15
Skirting,	145 " 4 " .....	5 80
Tongues,	232 " 10 " .....	23 20
Hearts,	235 " 5 " .....	11 75
Livers,	470 " 4 " .....	18 80
Headmeat,	312 " 5 " .....	15 60
Casings,	48 " 12½ " .....	6 00
Neck,	384 " 2 " .....	7 68

Total By-products ..... \$ 117 98

Tallow, 2,150 pounds at 5 cents..... \$ 107 50

Hides, 3,617 " 13 " ..... \$ 470 21

Net cost..... \$ 3,819 41

82 pounds (shrinkage in transit).... \$ 7 20

Cost.

Yield.

Dressed weight, 28,395 pounds.

Live, \$7.75, \$8.40, \$8.45.

Fresh killed, \$9.13.

Less 2½ per cent, \$13.80. ' "

Hides, 75 pounds per carcass.

Tallow, 45 " "

Beef, 57 per cent. " "

Less 2½ per cent, 710 " "

27,685 " "

STORE TEST—January 16, 1914, showing "Cuts" of Beef as prepared for Market.

	Pounds.	Cents.	\$ cts.
Frontquarters.....	134	12½	16 75
Brisket.....	33	11	3 63
First rib cut .....	6½	20	1 35
Second rib cut .....	7½	22	1 59
Third rib cut .....	9½	18	1 75
Shoulder bone .....	2½	4	10
Neck.....	10½	10	1 05
Shoulder (bone in) .....	12½	5	1 88
Shank.....	9½	5	48
Chuck.....	41	15	6 15
	132½	.....	17 98

Selling price..... \$ 17 98

Cost " ..... 16 75

Gain ..... \$ 1 23 or 7·3 per cent.

STORE TEST.—January 16, 1914, showing "Cuts" of Beef as prepared for Market.

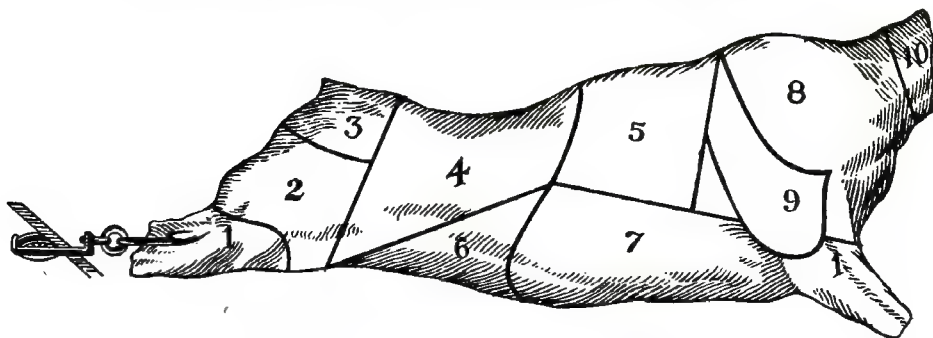
	Pound.	Cents.	\$ cts.
Hindquarters .....	143	15½	22 16
No. 1 sirloin .....	15½	28	4 27
No. 2 " .....	13½	23	3 05
Centre cut .....	14½	28	4 13
Porterhouse .....	12½	25	3 19
Short cut .....	6½	22	1 43
Flank .....	4½	8	37
Rump soup bone .....	3¾	5	19
Kidney .....	1	15	15
Rump roast .....	13½	16	2 20
Round steak .....	28½	22	6 19
Hamburg .....	8½	15	1 24
Shank .....	13½	5	71
Suet .....	3½	18	58
Bones .....	1½	2	03
	140		27 73

Selling price ..... \$ 27 73

Cost " ..... 22 16

Gain ..... \$ 5 57 or 25.1 per cent.

DIAGRAM SHOWING PRIMARY CUTS OF A SIDE OF BEEF.



- 1.—Shank.
- 2.—Round.
- 3.—Rump.
- 4.—Loin.
- 5.—Rib.

- 6.—Flank.
- 7.—Plate.
- 8.—Chuck.
- 9.—Clod.
- 10.—Neck.

NOTE.—Tenderloins, sirloin butts and strips are cut from No. 4. Rib rolls are cut from No. 5. Insides, outides and knuckles are cut from No. 2.

The evidence obtained by the Board of Inquiry (summarized as follows), supports the opinion that it is more economical to slaughter by the modern methods in vogue than by the old method of local butchering:—

Under the old method it was the custom to kill two or three cattle per week at the various small slaughter houses located throughout the country. Also the help was inexperienced compared with the men doing the work to-day under modern methods. Previously it was the custom for the men to work in the retail stores during the day and at night to slaughter cattle.

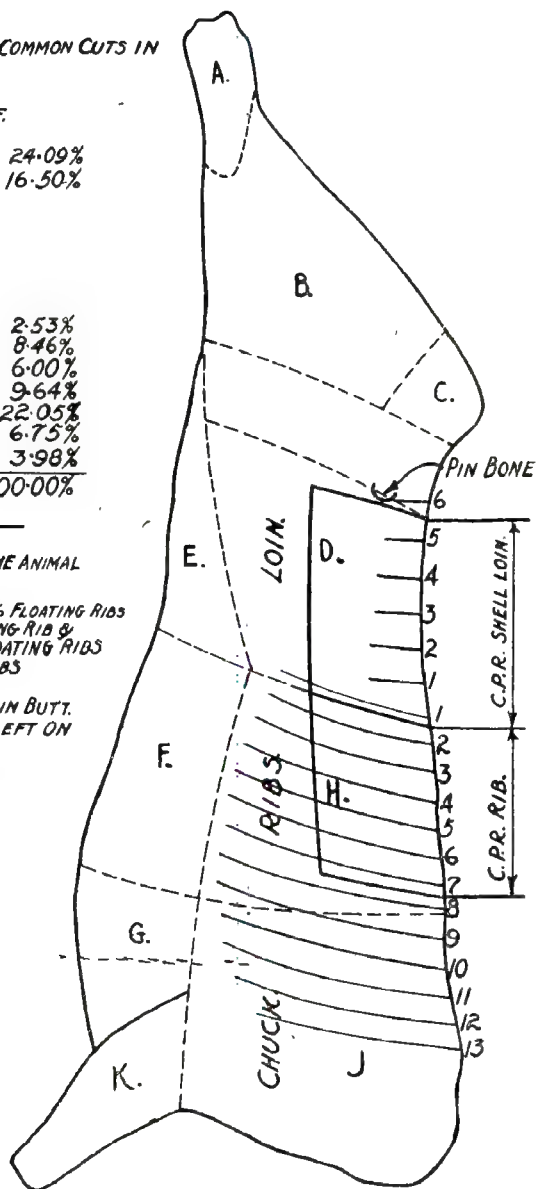
The hides would not be taken off as well and the intestines would be wasted, whereas to-day, under modern methods, there is no waste whatever.

----- DOTTED LINES INDICATE COMMON CUTS IN CHICAGO MARKET

A.	HIND SHANK	
B.	ROUND, RUMP & SHANK OFF.	
C.	RUMP	
A.B.C.	ROUND, RUMP & SHANK ON	24.09%
D.	LOIN	16.50%
	CONTAINS:-- SHORT LOIN.	
	LOIN END.	
	STRIP LOIN.	
	SIRLOIN BUTT.	
	BONELESS STRIP	
	TENDERLOIN.	
E.	FLANK	2.53%
F.	NAVEL END	8.46%
G.	BRISKET.	6.00%
H.	RIB	9.64%
J.	CHUCK	22.05%
K.	FORE SHANK.	6.75%
	SUET.	3.98%
		<u>100.00%</u>

———— HEAVY LINES SHOW SAME ANIMAL CUT FOR C.P.R.

CARCASS CONTAINS 13 LONG RIBS & 6 FLOATING RIBS  
 C.P.R. SHELL LOIN CONTAINS NO 1 LONG RIB &  
 NOS 1 TO 5 INCLUSIVE FLOATING RIBS  
 C.P.R. RIB- SIX RIB CUT LONG RIBS  
 NOS 2 TO 7 INCLUSIVE.  
 NO 6 FLOATING RIB LEFT ON SIRLOIN BUTT.  
 NOS 8 TO 13 INCLUSIVE LONG RIBS LEFT ON  
 THE CHUCK.



## C.P.R. STANDARD BEEF CUTS

MONTREAL 1ST JAN. 1915.

W. C. Cooper  
 MANAGER, S.D. & P.C. DEPT.



Where a staff of men are kept to do nothing but kill, better work and more economy are the results than in the case of a man who kills two or three cattle per week.

All abattoirs are inspected by the Government, and all modern plants are equipped with refrigerating machinery, where, regardless of weather conditions, the beef is properly chilled and well handled, as compared with the old method.

In the handling of fresh meats the important fact is to be borne in mind that fresh beef is a *perishable commodity*, and in the sale of it the entire stock has to be cleaned out (unless there is refrigeration) whereas in the matter of pork, if the entire store supply is not sold the balance remaining unsold can be cured, so that there is therefore little or no loss in pork through depreciation in value.

#### HOGS AND HOG PRODUCTS.

The tables of commodity prices as to hogs and hog products show that a price of \$9.08 in 1913 compared with one of \$3.86 in 1896 for live hogs. Dressed hogs and various hog products show increases from 100 per cent up in the past fifteen years.

Mr. W. E. Matthews, of Matthews-Blackwell, Ltd., who carry on business at several places in Ontario and Quebec, made statements as follows before the Board of Inquiry, on January 26, 1914:—

Telephone orders are the cause of a large number of parcels having to be delivered and incidentally for some of the increase in the prices of meats. It was necessary to employ an operator to do practically nothing but take telephone orders.

One trouble they have to contend with is the "c.o.d." order. Ordinarily their men are instructed to leave the goods in the case of c.o.d. orders when the price thereof is not forthcoming and to return next day for the money. Sometimes it is necessary for their drivers to call three and four times for payment of c.o.d. orders. All this has a bearing on the increased cost of meat, and it was admitted that such increase was passed on to the consumer. Mr. Matthews stated that they themselves were unable to bear this increased operating cost.

Upon being asked whether retail prices had advanced proportionately more than wholesale prices or cost prices, Mr. Matthews stated that they had not. He stated, however, that there was a wider difference relatively in the retail and wholesale prices of "best cuts," the best cuts having to carry the burden of the increased cost of operation.

As to increasing the supply, Mr. Matthews said that the present is an opportune time to improve the breed of hogs, especially in Eastern Ontario. The scrub stock has been pretty well cleaned out, and what is wanted is new blood in its place, both in the line of cattle and sheep. Live stock in sheep is becoming inbred and a new strain is needed.

#### PRICES IN ENGLAND AND IN TORONTO.

Mr. J. W. Flavelle, of the William Davies Company, Ltd., Toronto, made to the Board a statement regarding the difference in the prices of bacon in England and in Canada, of which the following is a summary:—

In Canada the situation in regard to the distribution of products differs greatly from the congested districts in Great Britain where distribution is easier. The expense of doing business in Great Britain is less than in Canada. There the congested centres have a larger volume of business to the individual store than here in Canada. There is no demand for the cheaper cuts in Canada. The surplus of Canadian shoulders is exported. A Wiltshire

side of bacon will give about three per cent more yield of meat than a Canadian side. In Toronto there is sale for hams only of a certain size and bacon only of a certain type. Big hams are not wanted. Their bacon and ham trade in England is a week-at-a-time market. Whatever is left over on Friday is sold on Saturday if possible and there may be a break of 3, 4, 5, 6 or even 7 shillings per 100 pounds. Market quotations frequently quoted in the newspapers are not sound. On the broad issue Canadian meats are not marketed in England at lower prices than in Canada.

The following article communicated to the International Institute of Agriculture by W. J. Kennedy, Director of Agricultural Extension, Iowa State College, will be found of special interest and worthy of attentive consideration:—

AN AMERICAN VIEW ON THE BEEF CATTLE SITUATION. PRESENT STATUS OF THE INDUSTRY.—*Communicated to the International Institute of Agriculture by W. J. Kennedy, Director of Agricultural Extension, Iowa State College.*

The solution of the beef cattle situation is one of the most important problems before our American people. This is something which concerns every man, woman and child in the United States. For the first time in the history of modern civilization our people are facing what appears to be a near beef famine. It has been gradually approaching us ever since 1907. The rapid increase in our population, thus a much heavier demand for beef, has caused high prices for all kinds of meat; thus many farmers have sold their breeding herds as well as the normal increase. The result has been a marked increase in demand and a very noticeable falling off in supply.

*The World's cattle supply.*—A shortage at home would not be so serious a matter from the consumers' standpoint, if there were an abundant supply in other countries. For some time the writer has been gathering data concerning the world's supply of cattle. It has been necessary to include all classes of cattle, because few countries outside of our own are able to furnish separate figures for beef and dairy cattle. Fairly reliable figures have been obtained concerning the increases or decreases in the number of both cattle and people in practically all of the leading meat-producing and consuming countries of the world since 1900. These figures show conclusively that in all of the countries, except Australia and France the increase in cattle production has not kept pace with the increase in the number of people. A careful study of the same will clearly reveal the fact that there is a world-wide shortage of cattle and that the most alarming condition of affairs prevails in the United States.

The average increase in population is 19.9 per cent and of cattle about 2.18 per cent.

Country.	Population Increase since 1900.	Cattle.	
		Increase.	Decrease.
		since 1900.	
	p. c.	p. c.	p. c.
France.....	2	2	
Germany.....	16	4	—
United Kingdom.....	10	4	—
Austria-Hungary.....	10	2	
European Russia.....	14	—	12
Canada.....	35	20	—
Brazil.....	20	—	20
Argentina.....	40	—	6
Australia.....	18	40	—
New Zealand.....	30	16	—
United States.....	24	—	30

*Free meats from foreign countries.*—A great deal has been said concerning the effect of putting meat on the free list. Some people have claimed that it would insure an abundance of good beef for the American people at moderate prices. Others have maintained that the putting of meat on the free list would drive the American farmer and ranchman out of the cattle raising business, on account of the low prices for meat and consequently of cattle on foot, which were sure to follow such legislation. A careful study of the world's supply would indicate that both factions are almost sure to be disappointed. That there is a world-wide shortage of beef cannot be denied. This being true the placing of meats on the free list is not likely to reduce appreciably the prices of beef to the consumer or the prevailing prices for beef cattle. It is a well established fact that Europe is meat hungry and must look to Argentina and Australia for its supplies, and must thus bid against the United States or any other contender in the world's market. Even the most optimistic believers in free meat figure that at the very outside not more than 4,000 head of cattle per week, or 2,000,000 pounds of beef, can be expected. This amount would barely furnish enough beef for our annual increase in population. The very lowest estimates on our annual beef consumption place the amount at 56 pounds per person, or for the whole population 14,400,000 pounds per day; thus our people would eat the entire amount of anticipated yearly importation of beef, some 100,000,000 pounds, in about seven days. This is a case where the law of supply and demand will be the controlling factor in the establishing of prices.

*Conditions in the United States.*—The beef cattle industry of the United States is in a most precarious condition. Between January, 1907, and January, 1913, the number of beef cattle in the United States decreased by 15,970,000 head, or about 32 per cent. During the same time our population increased about 10,000,000 people. Conditions are going to be worse in the next two or three years. A few weeks' study of any of the stockyards' markets will convince the most optimistic person that there are altogether too many cows, heifers and calves being rushed to market for the future good of the cattle business. It is a most pitiful sight, in the face of the present marked shortage of cattle, to look over the daily receipts of our southern and western markets and find from 15 to 40 per cent of the animals offered to be good young she stuff, just the kind that are needed for breeding purposes on the farms. This condition of affairs, if continued, can mean but one thing, namely, fewer and fewer cattle in the years to come.

*The Farmers' Duty.*—It has been said that it is the farmers' duty to feed our people. This must necessarily include meat supplies, one of the most important of which is beef. If he is to fulfil his duty, he must get busy and raise more cattle. The present indications are that the future prices of beef cattle will be high enough to make the business a profitable occupation. Beef production must also be regarded as a factor in the conservation of the fertility of our soil. Soil conservationists claim that every time a bushel of corn is sold off the farm about 16 cents worth of fertility is removed. If corn be fed through beef cattle, but 5 cents worth of fertility is removed. About the same ratio prevails for the other grain and forage crops of the farm. These are factors worthy of careful consideration. There is no more important problem before our American people than the maintaining and building up of the fertility of our soil. Considering the labour involved, no line of farming is better adapted to soil-building than beef production.

*Factors necessary to insure successful production of beef in the Corn Belt of America.*—1. We must put more of our land under blue grass pasture. Many Iowa farmers are getting from \$10 to \$15 per acre from the blue grass pastures through the utilization of the same for beef production and cattle feeding purposes. This is an excellent way to help solve the labour problem on the farm, as beef cattle require but very little labour during the grazing season.

2. The farmers of Iowa annually leave from five to seven million acres of corn stalks in the fields, thus very largely wasted. This is a wasteful method of farming, something unknown in the more densely populated countries where land is on a par with or higher in value than our own. A large amount of this waste could be, and will be, eliminated through the use of the silo, and then we shall be able to winter economically more beef cows and young stock on our farms.

3. There should be some alfalfa grown on every Iowa farm. This is the heaviest yielding, most drought resisting, most palatable and most nutritious crop that can be grown on our farms. No other crop is so valuable in the growing and finishing of baby beef.

4. The wise farmer will retain his heifer calves and cows for breeding purposes. Future prices for beef cattle should be as high as or higher than those of the present time; thus it is a short-sighted policy which leads a man to dispose of his breeding stock. This is a time when men should increase, not reduce their breeding herds.

5. A man to be successful in any line of work must stay by the job. The fellow who is always changing never makes much progress. This is especially true of the beef business. No man can anticipate the high markets or the low ones, but the man who is always in the business is sure to reap profits when the other fellow is short, that is when the demand is greater than the supply.

#### PROFITS OF PACKERS AND ABATTOIRS.

A full statement of profits on meats for the years 1901 to January 30, 1914, was furnished the Board by the Harris Abattoir Company, of Toronto, and from it the following statement was compiled showing the relationship of profits to meat handled:

1904-5, profits were	34.40	cents per	100 pounds of meat.
1905-6	49.20	"	"
1906-7	33.11	"	"
1907-8	35.44	"	"
1908-9	43.30	"	"
1909-10	39.85	"	"
1910-11	25.60	"	"
1911-12	21.14	"	"
1912-13	52.90	"	"
1913-14	19.22	"	"

Taking in all the business lines of the company the profits represented 39.69 cents on every hundred pounds of dressed meat sold and eliminating the departments entirely independent of the meats the profits were 30.13 cents for every hundred pounds of meat, a little less than one-third of a cent a pound.

The report of Swift & Company, of Chicago, shows a turn-over in 1913 of over \$400,000,000, with a net profit of \$9,250,000 after paying a dividend of 7 per cent on their capital of \$75,000,000. The profits represent a small fraction of 1 cent per pound of meat handled.

Statements in regard to the shipment of meat within the provinces of Canada, submitted by H. S. Arkell, Assistant Live Stock Commissioner, Department of Agriculture, appear in Appendix No. 26.

A memorandum prepared by James Audley, of the Veterinary Director General's Branch, in regard to meat inspection in Canada, appears in Appendix No. 16.

The subject of dairy production in Canada is dealt with by J. A. Ruddick, Dairy Commissioner, in an address which appears in Appendix No. 23.

Appendix No. 27 contains memoranda prepared at the Central Experimental Farm, Ottawa, on "Cost of Beef Production," "Cost of Pork Production," "Cost of Mutton Production," and "Cost of Milk Production."

#### MILK.

The advance in the price of milk to consumers east of the Prairie Provinces appears to be over 40 per cent. The high prices of feed are undoubtedly the direct



factor in the advance in milk prices. The crusade for farm sanitation and pure milk has also contributed to the advance in the price of milk.

In reducing the high cost of the distribution of this article of prime necessity, the means may be found of reducing the price to the consumer and of checking unnecessary advances.

A prominent milk producer in British Columbia stated that he received 18 cents per gallon for his milk, while the city consumer paid 40 cents per gallon for the same. He suggested that the expense of delivery be reduced by eliminating the duplication of carriers—delivery to be made by one body through a clearing-house system or by municipal distribution on a cash basis.

TABLE NO. 1.—Comparative statistics of the dairying industry expressed in terms of milk, showing production, exports, imports, and total and per capita consumption in the census years 1901 and 1911; prepared in the Markets Division, Dairy and Cold Storage Branch, Department of Agriculture, December 24, 1913.

	Census. 1901.	Census. 1911.	Per Cent of Increase or Decrease.
Population of Canada . . . . .	5,371,315	7,204,838	34.13
	Lb.	Lb.	
Total production of milk . . . . .	46,866,834,000	9,871,178,103	43.75
Exports of dairy products as milk . . . . .	2,514,596,967	2,236,663,687	11.05
Imports of dairy products as milk . . . . .	34,886,346	39,871,207	14.28
Total consumption as milk . . . . .	4,387,123,379	7,674,385,623	74.92
No. milch cows in Canada . . . . .	2,408,677	2,594,179	7.70
Average pounds milk per cow . . . . .	2,850	3,805	33.50

<sup>1</sup> As milk production was not included in the 1901 Census, the quantity shown in the 1901 column was arrived at as follows: The total value of all dairy products in 1900 was \$66,470,953, which included the manufactured value of cheese and butter made in factories, and the average gross value of the milk supplied to factories was 96.8 cents per hundred pounds. Taking this figure as a basis, the above total value represents a total milk production of 6,866,834,000 pounds.

<sup>2</sup> At the average production per cow of 1901 it would have required 3,463,571 cows to produce the quantity of milk shown by the 1911 Census—an increase of 1,054,894 cows, or 43.79 per cent.

TABLE NO. 2.—Comparative statistics of the Butter Industry showing production, exports, imports, and total and per capita consumption in the census years 1901 and 1911; prepared in the Markets Division, Department of Agriculture, December 24, 1913.

	Census. 1901.	Census 1911.	Per Cent of Increase or Decrease.
Population of Canada . . . . .	5,371,315	7,204,838	+34.13
	Lb.	Lb.	
Total production of butter . . . . .	141,409,815	202,796,699	+43.41
Exports of butter . . . . .	16,335,528	3,142,682	-80.76
Imports of butter . . . . .	1,146,639	1,227,390	+7.04
Total consumption . . . . .	126,220,926	200,881,407	+59.15
Per capita consumption . . . . .	23.49	27.88	+18.68



## CHEESE.

The rise in the price of cheese since 1896 is between 50 and 60 per cent as will be seen on reference to the tables of wholesale prices.

The consumption of cheese in Canada has not been as large as its value as an article of food would warrant. When the prices of other commodities have gone up, the consumption of cheese has increased. There is an increasing demand for it now on account of the high prices of beef and other commodities.

The outlook for increased production of cheese in Canada in the immediate future is not encouraging, according to the opinion of representative men in this industry.

The following is an extract from Mr. R. M. Ballantyne's statement before the Board of Inquiry at Montreal on the 12th January, 1914:—

The farmers to-day can get such good prices for their veal calves that they prefer to raise them and sell them as veal, and they can only do this by keeping the milk at home to raise the calves.

There are fewer young cattle on farms to-day than there has been on the Quebec and Ontario farms in twenty-five years, and with this situation we are bound to have high prices for veal, beef, and cheese for years to come—butter also, but not to such a great extent.

Milk is being shipped to the United States out of the section south of Montreal. For years past they have been taking large quantities of milk, but now they take both cream and milk when they can and when it pays them to do it. This condition applies to the whole district along the river border, where it is easy to transport across the river, consequently the supply is going to be shortened for home consumption.

In the district west of Toronto the growth of towns and cities, and the growth of condensed milk factories has reduced the production available to the consumer.

The exports of domestic cheese from Canada during ten years ended March 31, 1914, are shown in the following table:—

Year.	Quantity.	Value.
	Lb.	\$
Year ended June 30, 1880 .....	40,368,678	3,893,366
" 1890 .....	94,260,187	9,372,212
" 1891 .....	106,202,140	9,508,800
" 1892 .....	118,270,052	11,652,412
" 1893 .....	133,946,365	13,407,470
" 1894 .....	154,577,480	15,488,191
" 1895 .....	146,004,650	14,253,002
" 1896 .....	164,689,123	13,956,571
" 1897 .....	164,220,699	14,676,239
" 1898 .....	196,703,323	17,572,763
" 1899 .....	189,827,839	16,776,765
" 1900 .....	185,984,430	19,856,324
" 1901 .....	195,923,397	20,696,951
" 1902 .....	200,946,401	19,986,281
" 1903 .....	229,099,925	24,712,943
" 1904 .....	233,980,716	24,184,566
" 1905 .....	215,733,259	20,300,500
" 1906 .....	215,834,543	24,433,169
Year ended March 31, 1907 (9 months).....	178,141,567	22,006,584
" 1908 .....	189,710,463	22,887,237
" 1909 .....	164,907,139	20,384,686
" 1910 .....	180,859,886	21,607,692
" 1911 .....	181,895,724	20,739,507
" 1912 .....	163,450,684	20,888,818
" 1913 .....	155,216,392	20,697,144
" 1914 .....	144,478,340	18,868,785

## POULTRY AND EGGS.

The rise in poultry since 1897 has been about 150 per cent. Fowls have doubled in price, and chickens and turkeys have more than doubled.

In eggs, the rise is approximately 150 per cent in fifteen years.

A large packer suggests the best way of reducing the price of eggs, is to eliminate the loss before the eggs get into cold storage. He said he had seen a case of eggs holding 30 dozen, (May, June, and July eggs) with three or four dozen of the eggs bad.

The Live Stock Branch of the Dominion Department of Agriculture has been engaged for some months in an investigation of the Canadian egg trade.

At this time when the subject of eggs is being discussed so freely by the press and the public generally it may be of interest to cite some of the conclusions reached as a result of this investigation to date.

## THE CONSUMPTION OF EGGS IN CANADA.

Canadians are large consumers of eggs and the consumption per capita of eggs in Canada is steadily increasing. The following table will give some idea of the rate at which consumption is expanding:—

TABLE I.—Relation of Consumption to Production in the Canadian Egg Trade.

	Census of 1891.	Census of 1901.	Census of 1911.
Population of Canada .....	4,833,239	5,371,315	7,204,838
Poultry population of Canada .....	12,696,701	16,562,084	29,548,723
	doz.	doz.	doz.
Total egg production.....	64,499,241	84,134,802	123,002,132
Exports of eggs .....	8,002,935	11,363,064	92,164
Imports of " .....	602,533	951,745	2,378,640
Total consumption.....	57,078,839	73,723,483	125,288,608
Average consumption per capita .....	11.8	13.72	17.39

It may be noted that the increased consumption per capita between the years 1901 and 1911 amounts to nearly four dozen. This increase is not by any means confined to the cities. Farmers, generally, are eating more eggs than ever before. In many rural districts, it is practically impossible to secure fresh meat at certain seasons of the year. At such times eggs are usually plentiful and are used freely.

In Appendix No. 24 there will be found reports prepared by W. A. Brown, B.S.A., of the Department of Agriculture, on the "Canadian Egg Trade," the development of co-operative poultry work in the Province of Prince Edward Island, and on the relation of the preservation of eggs by cold storage to the development of the poultry industry in the United States and Canada.

Four distinctive classes of meat animals supply nearly the entire meat production of this country. These are milch cows, other cattle, sheep, and swine.

There has been a considerable decline in the number of sheep in Canada in recent years with an increase in price, which has contributed in part to the advance in cost of living.

We have no generally accepted standards for the determination of the various grades of wool. This lack of standardization makes it impossible for the wool grower to know the grade of wool he is producing or the value of it in the market.

Were wool standardized into grades intelligible to the grower it would encourage him to produce a better quality of wool, and would do much to place the entire wool industry on a more satisfactory plane.

In this connection the suggestion has been made that experiments should be conducted, under the supervision of experts, to determine what type of sheep produces the most desirable quality of wool and is best adapted to the conditions existing in the various parts of the territory concerned, and that for Canada the industry should be primarily established on a meat basis with wool as a by-product.

The following "Brief Summary of the Status of Sheep Raising in Canada" has been furnished to the Board of Inquiry by Mr. T. R. Arkell of the Live Stock Branch, Department of Agriculture:—

Sheep-raising in Canada has been in a decadent condition for the past thirty years. In 1881, the sheep population was given at 3,048,678, and in 1911, 2,160,000. Since then a slight increase has occurred mostly in the maritime and western provinces.

The reasons for the reactionary state of the sheep industry especially in the middle, western and eastern districts may be given as follows:—

(1) The general indifference of the present generation of farmers to the advantages of sheep-raising when maintained as a permanent and specific asset to mixed farming operations. Unfortunately the vast majority of farmers still cling to the idea that sheep, in order to return a suitable profit, can only be ranged on the roadside and back pastures, where no other class of domestic animals can thrive. When grazing was prohibited to a great degree upon public roads, many small flocks disappeared. Besides, sheep kept under such conditions did not thrive, which tended to discourage the breeder.

(2) The dog menace, which has almost become a bogey. True, destruction of sheep by dogs in many districts, especially near cities, has been bad, yet it is by no means worse than most farmers think it to be. John Jones has some sheep killed, and very soon many farmers in that section forego sheep-raising. Yet such an accident may not occur again in a decade or more. The man who takes care of his sheep and does not abandon them in some back lot, where he may not see them throughout the entire summer, seldom has cause to fear unduly depredations by dogs. Of course, dog laws can be improved, and the running of dogs at large freely over the country should be restricted.

(3) Cost of fencing: Well-built fences are absolutely necessary for sheep, and it is only too true that farmers are loathe to expend money in permanent improvements, little realizing how much wisely spent money in this respect will enhance the value of the farm.

(4) Lack of care and the prosecution of efficient methods of management. Sheep will not thrive under neglect, and too many of our educators have been misleading the people in this respect. Farmers who adhered to this idea did not produce animals that would command a ready sale on the market, so they jumped to the conclusion sheep-raising was not a profitable industry and forsook it.

(5) Our breeders of registered animals have done little to develop the industry on the average farm. They catered almost entirely to American customers and most frequently it was only the rejects that found their way for breeding purposes to Canadian farms.

(6) Canadian consumers are too easily satisfied with an indifferent class of mutton on their table and not appreciating the taste of exquisitely flavoured mutton, do not demand it. Consequently, frozen mutton obtains a ready sale, which does not help to encourage the home industry.

(7) Lack of effective marketing facilities for mutton and especially wool: This I consider, a very potent agency indeed. The farmers in most instances have to be satisfied with the price the local buyer gives them which may be "any old price," depending upon the extent of competition existing in that locality, and competition is seldom keen, for districts are frequently well divided amongst drovers and dealers, so as to prevent the contingency of active bidding one against the other. Co-operation, I think, should comprehend an efficacious remedy in this regard.

(8) Few farmers recognize clearly the benefits of sheep in maintaining soil fertility and destroying weeds. The manure of sheep is rich and, besides, evenly distributed over the field. They will eat and apparently relish almost every class of weed, even the Canadian thistle.

A re-development in sheep-raising is undoubtedly occurring now. It is obvious at the present time in the maritime and western provinces and is due principally to the high prices for mutton and wool which have obtained for the past few years, due to the great scarcity, compared with the demand, of both products in Canada. The removal of duty upon wool entering the United States has especially raised the price of it this year, since it brought American buyers here, thus creating keen competition. This feature has also directly created the revival in the Maritime Provinces, for breeders there are now able to cater to the Boston market by cheap water transportation and are not forced to depend upon home demand which is restricted. The development in the west is due to another cause namely, the introduction of mixed farming in what were formerly exclusive grain belts.

The status of the sheep industry in Canada and the relation between supply and demand as regards dressed mutton and lamb can best be illustrated by a comparative statement which will set forth the statistics of population, imports, exports, marketings and interprovincial trade as detailed in the Census and Customs reports.

SUMMARIZED STATEMENT with respect to the discussion upon the statistical status of the industry.

#### SHEEP IN CANADA.

	1912 <sup>1</sup>	1901 <sup>2</sup>	1891 <sup>2</sup>	1881 <sup>2</sup>	1871 <sup>2</sup>
Canada.....	2,360,600	2,510,239	2,563,781	3,048,678	3,155,509
Prince Edward Island.....	104,500	125,546	147,372	166,496	
Nova Scotia.....	343,200	285,244	331,492	377,801	398,377
New Brunswick.....	179,800	182,524	182,941	221,163	234,418
Quebec.....	519,800	654,503	730,282	880,833	1,007,800
Ontario.....	888,700	1,046,456	1,021,769	1,359,178	1,514,914
Manitoba.....	32,300	29,464	35,338	6,073	
Saskatchewan.....	111,800				
Alberta.....	181,000	153,152	64,920	846	
British Columbia.....		33,350	49,163	27,788	

<sup>1</sup> Census and statistics.    <sup>2</sup> Census.



## EXPORTS OF SHEEP AND MUTTON FROM CANADA.

	Sheep.	Mutton.
1896 <sup>1</sup> .....	391,490	150,013
1906 <sup>1</sup> .....	244,262	105,062
1909 <sup>1</sup> .....	118,896	39,030
1911 <sup>1</sup> .....	46,597	17,865
1912 <sup>1</sup> .....	21,418	40,107
1912 April 1 to September 30.....	2,774	12,542

<sup>1</sup> Fiscal years ending March 31.

## SHEEP AND MUTTON IMPORTED INTO CANADA.

	Sheep.	Mutton.
1910 <sup>1</sup> .....	35,844	2,094,023
1911 <sup>1</sup> .....	68,673	2,768,161
1912 <sup>1</sup> .....	192,530	1,041,263
1912 April to September 30.....	* 154,435 <sup>2</sup>	2,580,018

<sup>1</sup> Fiscal year ending March 31.    <sup>2</sup> Not revised.    \* Total—1912, April to September 30.

British Columbia.....	44,974 head.
Alberta.....	62,919 "
Saskatchewan.....	24,258 "
Manitoba.....	20,304 "
Ontario.....	1,980 "
* Total.....	154,435 "

## SHEEP AT LEADING MARKET CENTRES.

	1910.	1911.	1912 to Oct. 31 (10 mos).
Toronto.....	196,542	227,903	149,750
Montreal.....	98,023	117,779	102,199
Winnipeg.....	30,775	43,614	39,682 <sup>1</sup>
Total.....	319,340	389,296	291,631

<sup>1</sup> It is reported that all of these, with the exception of about 1,000 head, were imported sheep.

A memorandum by Charles W. Peterson in regard to the bearing of Australian mutton on the cost of living in Canada appears in Appendix No. 25.

## XVIII.

## CO-OPERATION.

It is the production and distribution of food that agriculturists are beginning to find the greater cause of the unfavourable condition in which both producer and consumer are finding themselves to-day.

Manifestly the most wasteful part of our economic system is that concerned with distribution. There is enormous waste of effort now in getting the product to the consumer. We have made little progress in getting products direct to the consumer in the least costly way, except in the matter of transportation.

The possibilities of co-operation as a means of eliminating the wastes in distribution and reducing the final cost of goods to consumers, and also increasing the purchasing power of wages and incomes, have hardly been touched in this country.

The advance of the cost of living is now directing attention to distributive co-operation, notably in the direction of co-operative storage facilities at shipping points and in central distributing agencies.

It is difficult to determine the present extent of co-operative merchandising in Canada, owing to the condition of the movement.

Our attention has been directed to the United Fruit Companies (Limited) of Nova Scotia, The British Columbia Fruit Growers' Association, The National Fruit Growers' Association, The Grain Growers' Grain Company, and other associations.

In Appendices Nos. 33, 34, 35, and 36 the following documents are inserted:—

(1) An Explanation of the Provisions of the Agricultural Co-operative Associations Act of Saskatchewan, 1913.

(2) History of the Co-operative Movement in Nova Scotia, by A. E. Adams, Secretary of the United Fruit Companies of Nova Scotia (Limited).

(3) Official Memorandum respecting Agricultural Co-operation in France, as published in the Monthly Bulletin of Economic and Social Intelligence, April, 1913.

(4) Fundamental Principles of Co-operation in Agriculture, being Circular No. 123, University of California Agricultural Experiment Station, by G. Harold Powell, General Manager of the California Fruit Growers' Exchange.

## XIX.

## MARKETS AND MARKETING.

Markets regulate and tend to make "fair and reasonable prices."

The lack of a comprehensive and aggressive policy for the development of the market along modern methods constitutes a considerable factor in the needless expense of the necessities of life to consumers in the cities and towns of Canada.

Modern appliances with terminal and other facilities are required for the prompt and economical handling of incoming and outgoing commodities and to enable merchants and traders to render satisfactory and efficient service to the consuming public.

A solution, to a notable extent, in the high cost of living, has been suggested from many quarters, in the operation of public markets in every town and city, to be absolutely controlled by the civic authorities and to be provided with facilities and conveniences for preserving fruits, vegetables, milk and other products, and where produce from farm, field, flock and sea can be sold directly by the producer to the consumer every month in the year.

Circulars were addressed by direction of the Board of Inquiry to the mayors of the principal cities and towns of Canada, on the subject of Public Markets. A summary of the information furnished in reply to these circulars is compiled in Appendix No. 28.

The effect of markets on the cost of living has been carefully studied by Mr. John Wanless, Toronto. His pamphlet on the subject is submitted herewith for special consideration.

The Board desires to emphasize the desirability of educating women in the art of marketing and economic housekeeping. This implies a knowledge of the values of foods, especially the food values of various cuts of meats, knowledge of best methods of buying, storing and saving food, and of preparing and cooking food.

It appears also of importance to encourage the artisan and small householder to cultivate his garden plot, if at all possible, to supply his table with fresh vegetables in season, and such vegetables as potatoes, onions, beets, carrots, cabbage, cauliflower, and celery through storage for winter use.

#### THE EFFECT OF MARKETS ON THE COST OF LIVING.

*(By John Wanless, Toronto.)*

When it is realized that 50 per cent of the budget of the average person goes for food, it is readily seen why the citizens of Toronto, in common with many people in various parts, are feeling the large increase in the cost of the necessities of life, and are anxiously inquiring for the potential causes, with a view to the possibility of their removal, or at least their counteraction. From a cosmopolitan standpoint the great increase in the production of gold, and the fabulous sums wasted every year in military and naval expenditures are mentioned, but there are local grounds of importance more within our reach, and to these reference will be made.

There is no doubt that the standard of living is much higher than that of a quarter of a century ago, and the same general attention is not given to the science of good housekeeping as in former years. Social workers have discovered that many housekeepers are not familiar with the most economical methods of purchasing, and what is still more serious, are not adepts in preparing wholesome, edible foods, at the lowest cost to the family purse.

This, to a certain extent, may be accounted for by the employment of girls and women on outside work, such as is performed in factories and stores, and also apartment house life, all of which discourage slowly prepared, inexpensive meals, and have led to a demand for foods easily and quickly prepared over a gas stove. Shrewd men with an eye to business, have been prompt to avail themselves of an opportunity to meet the demand, and through persistent advertising of specially named goods in cans or packages, identical with bulk goods that sell in bulk more cheaply, have met the requisition. The amount of water in canned goods, it is estimated, may make a difference of 10 per cent to 20 per cent in their value, and the weight of food in package is usually reduced so that it is said that ten or twelve ounces are given for a supposed pound. In other words, customers who purchase in this manner, pay for water, tin cans, cardboard and labels, at an unnecessary computed average in cost of from 50 per

cent to 100 per cent. Buying in small quantities, on credit, over the telephone, and insisting on a delivery that costs at least 12 per cent and purchasing out-of-season goods, all help to pile up a formidable bill for food.

On the other side producers and their families enjoy many comforts and luxuries that several years ago were practically unknown. Whereas the family did the work about the farm or garden, now the young people are in the city, and hired help must be employed at an enhanced wage. In the butchers' realm the killing of young calves has helped to bring about a serious shortage of meat. So much so is this the case that the government of the Argentine Republic, for instance, has been compelled to take drastic action in its enactment, forbidding the slaughter of female cattle under six years of age. The abandonment of the raising of sheep has also contributed to an advance in the price of mutton, but the difference in price between sweetbreads at 20 cents in Hamilton, and 65 cents in Toronto, or new laid winter eggs at 40 cents a dozen on the outside, and at 60 cents a dozen in the city, must be accounted for on other grounds, as we shall see further on.

During the last twenty-five years the rural districts of Ontario have witnessed a considerable exodus to Northwest Canada, and to the various cities. As a result, production here has not kept pace with consumption, and we all know that prices advance when the demand exceeds the supply. This perhaps might not have become as aggravated if our governments had inaugurated an attractive back-to-Ontario land propaganda, or had replaced our departed Ontario people by substituting immigrants from the sturdy yeomanry of the country districts of Great Britain.

Then the breaking up of farms and gardens in the environs of the city, to be used for building lots to meet the expansion of Toronto, has not only taken thousands of acres out of tillage, but has also pushed the cultivated areas farther back and thereby increased the cost of haulage. It has been estimated that the price accumulation between producer and consumer averages 136 per cent under present conditions, of which 45 per cent is due to cost of carriage, and this latter can be traced to a defective, inadequate transportation system from outside points to Toronto. All are aware that the Steam Roads are fairly well and conveniently situated in Toronto. We have them on the Esplanade, across the centre of the city, and on what is known as the "Belt Line." While it is true that the railroad business is separate from the storage and supply handling business, it is proper that the railroads should be required to furnish terminals and storage facilities for the sale of produce at certain convenient points on their lines, with a view to giving immediate connection between the terminal and the merchants. This plan would secure a large saving in the cost of handling. If in addition to this the railroads were generally to supply facilities for the auction of food supplies as received by them, the matter of primary prices could be adjusted at the terminal point, on the most definite and equitable system known. It is computed that a saving of from \$10 to \$20 per car can be effected by proper track delivery alone. Then again there is room for considerable improvement in transmission. The services are, as a rule, too infrequent, too slow, and the charges too high. In one instance it was discovered that almost a week elapsed between the time when milk was taken from the cows and delivered to the private consumer. Toronto has been sadly neglected by the steam railroads not furnishing a better service within a radius of fifty miles.

Further, the trolley freight service has hardly materialized as yet. What we have is in an inadequate and unsatisfactory condition. Its extensive development would mean giving transportation facilities from every section of the city to each outlying hamlet, and would make it possible to bring direct to the several parts of the city, country produce, fresh and in variety, from the farms and gardens within a radius



of fifty miles in every direction. Such a development would in effect add about 1,000 square miles of productive territory, upon which Toronto could depend for its country produce. It would not only make it possible for farmers in certain regions now without adequate transportation facilities, to freight supplies more cheaply and more quickly into every section of the city, but it would develop the farming communities, focus their attention upon the possibilities of Toronto's markets, and would give an inter-trade avenue for the distribution in the suburban and rural districts, of commodities that are manufactured or sold within Toronto.

Great possibilities lie in the development of water transportation, and the extended use of fast motor-boats on lake Ontario. This will, in all probability, come to pass as soon as the Harbour Commission carries its proposed plans to completion. Through the development of water transportation, through the increased use of the motor-boat, through more efficient freight service by steam roads, through a complete system of good inter-county roads, through the parcels post, through the use of motor-trucks, and through the development of trolley freight, a more facile, cheaper and more complete transportation system can be developed, which will cover in a complete network all the outlying agricultural sections. Such a system, now not existent, will make the farm at once more productive and more attractive, will make it possible to ship Toronto goods directly to the farm, will make Toronto a prosperous distributing urban centre, and will give Toronto consumers better country produce at lower prices.

There are three main systems by which prices are regulated by dealers. They are by private treaty, by interested parties meeting and distributing by mutual agreement and by auction sale. *But perhaps the best regulator is an abundant and continuous supply, and effort needs to be made with this in view.* Suitable selling marts, free from onerous ordinances, available for bona fide producers, in convenient, accessible, well located districts, will encourage an abundant inflow. Hitherto our distributing centres have been too far from residential sections, and for this reason people who object to lose time and car fare, have held aloof. In the past a narrow policy has been pursued, the main object appearing to have been to obtain a revenue by penurious methods, instead of by the swing of a broad, generous, attractive course of action. Antagonistic, selfish interests, too, have been allowed to intrude, and be heard, and they have crowded out the type of producer who is useful to the public, and the one originally intended to have the right of way.

Given then an adequate supply of food stuffs, it is apparent that the cost will still be enhanced if the supply must pass through numerous hands and be carted from place to place in the city. Of course there are many people who do not and need not object to any price they are asked to pay, but on the other hand there is a vast number of people who find it necessary to closely scrutinize every cent they expend, and these citizens are entitled to have a voice as to how and where they shall buy. If a householder prefers to buy from a farmer's wagon and carry her purchases home, she has a perfect right to be provided with market facilities that admit of her so doing. It is quite evident that the time is come when we must do some thinking. In every line we find more and more system in getting goods to market, and efforts are being made to cut down the cost of production and eliminate waste. But in that one article, food, so absolutely necessary to human life, we find the least system at every point, and the greatest possible percentage of waste. In the belief that producers' markets will lower the cost of living, many cities and towns are clamoring for such institutions. At the present time the consumer is not doing his own marketing from the producer, and something is necessary to bridge the hiatus.

In northern climes home grown products could be sold in a market during June, July, August, September and October. During the other months that which might be sold would be limited, and the consumer would be at the mercy of the profit takers if a remedy could not be provided. When goods are in season the producer and consumer are brought together without difficulty. During the cold months goods not grown in hot houses, must necessarily be shipped from a distant section where summer conditions prevail, and these could be consigned to an indispensable individual known as "The Market Master," from producers with whom the master is in touch. The only difference then will be the cost of transportation and the small expense of operating the market. In the case of fish, tropical fruits and so forth, the market master could carry out the direct buying plans throughout the year, his tropical fruits coming from an importing company. This is a modified form of municipal ownership. Its successful working would largely depend on the capability of the market master, who should not be the brother-in-law of some one's cousin, but be a strong, brainy, active, tactful business man, familiar with the produce trade, and be paid as much as \$2,000 per year salary, and held responsible for successful operation.

If you compare Toronto with other cities of similar population, as will be shown later on, you will find that we have practically only one market, and that an apology for one. Everywhere in Europe the provision of adequate terminal markets, under municipal control, is pointed to as a powerful aid in keeping food prices down. A central position is necessary for such a mart. The city should have effective control not only over the market, but also the adjacent streets, wharves, and railroad sidings. In Dayton, Ohio, that city by its curb markets, has gone farther in bringing producer and consumer together than any other city of its size. On three mornings every week an exclusive farmers' uncovered market stretches along the curb for fourteen city blocks, and all farm products are sold at rates fixed under free competition. Each farmer is assigned space to back his wagon up to the curb and sell till 10 a.m., when the market ends. Another important adjunct feature is what is known as the "basket market." This is supplied largely by women, who come by train from neighbouring towns and villages, carrying their products with them. They stand behind counters, without any seating accommodation; we regret to say, and are very liberally patronized by eager buyers. The idea is popular and effective, and would respond freely if properly encouraged. Yet again there are butchers' markets, devoted almost exclusively to meat and fish. These are usually arranged with stalls, and should have suitable cold storage facilities attached to them. St. Patrick's market, so long and shamefully neglected, could be transformed into an ideal meat market and made revenue producing at an insignificant cost.

The wholesale fruit market is one of the most important for Toronto. We are excellently situated in this city, between the fruit belt and the Northwest, for the establishment of such an institution. We are a centre for water and rail traffic and would soon become a great distributing centre if this important trade were encouraged and provided with suitable, convenient and commodious premises near the boats on the esplanade.

The mistake is often made in erecting structures that cost far more than is necessary to spend. Just think of the immense amount wasted in unused overhead space in St. Lawrence Market. Some of the most successful markets are little more than simple shelters. But in conjunction with any market there should be horse sheds, motor sheds, lavatories, water supply and waiting rooms, and necessary attractive conveniences.

It is better to have more land and less pretentious buildings. A study of conditions in other cities is helpful in dealing with the situation here. In Buffalo, N.Y., there are four public markets, owned and controlled by the city. They are considered a success, as the people get a larger assortment at a lower cost, this lower cost being brought about by intense competition. The Market Master is paid \$2,200 per annum, and total expenses in 1911 were \$19,000, and total receipts \$63,000. The stalls in the main building are rented at from \$80 to \$150 per year, and there are 556 booths in all. During the producing season from 500 to 600 farmers use the market daily, and sell from wagons. The commission men act in a friendly manner towards the markets, and outside goods are shipped in by various dealers in the market. To each farmer a 6-foot wagon space is allowed; single wagons are charged 15 cents a day; teams 25 cents a day. Their space is reserved daily until 7 a.m. If at that time they are not on the market, the space is rented to a huckster. The booth holders in the brick building take out a yearly lease, payable quarterly, in advance. The rent is fixed by the Board of Aldermen, through its Market Committee and Superintendent of Markets. The main building is open at 4 a.m., from April 1 to November 1, and from 5.30 a.m. from November 1 to April 1. Only certain lines are allowed to be sold. The main market building closes at 2.30 p.m. Booth holders on streets are open until 4 p.m. or 6 p.m. Besides the booths in the main structure, those contiguous to the streets and space for farmers, there are hucksters who do business at tables. Weekly tickets are issued to them, payable in advance. The charges vary from \$1 to \$2 per week. Besides the superintendent of markets, there are two clerks at each market for collecting, at salaries of \$1,100 per year, two sweepers at \$2 per day, and a lady caretaker-attendant, at \$360 per year.

There are three markets owned by the city, and one by a private corporation in Cleveland, Ohio, all of them well patronized by the public. The market master receives a salary of \$1,800 per year. The three markets furnish a total of about 500 booths, with unlimited curb space for farmers. The booths rent for from \$60 to \$200 yearly, according to location. About 1,100 farmers are allotted 7 feet each at curb in the market district, at a rental of \$10 per year. Renters of the stalls in the market houses receive shipments from other communities, and wholesalers are friendly to the market. Competition between the 500 renters of stalls and the fact of them having but a low rent to pay, together with "no charge" for telephones and no delivery service, keep down the prices.

Cleveland boasts of having the handsomest market house in the world. Its cost was \$500,000. There are 110 stalls; three aisles of meat dealers occupy the stalls in the centre of the floor, while butter and poultry dealers are allotted the stands along the side walls. The fish market is in the northeast end of the building. The floors inside the stands are cement. None of the stalls have telephones, it being the belief that the use of *telephones* would tend towards costly delivery and credits. A shed for fruit and vegetable dealers will adjoin the main building, and will be completed soon.

Cincinnati has four public markets, all owned by the city. The rules and regulations are governed by ordinances passed by the city council. The annual expenses of \$12,000 per annum include the salary of the market master, which is \$900, and also repairs, heat, light and other expenses. Inside stalls, which are occupied by the butchers, butter vendors and so forth, bring a yearly rental of \$100 each, and yearly payment of \$15 entitles the payer to a stand 6 feet wide on the curb. A certain amount of space is set aside for farmers and truck gardeners, and they may occupy



his space free of charge. Approximately 500 farmers use these markets. Commission men and produce dealers do not clash with the markets, and during the season commission men receive shipments of fruit from other communities at the market houses. The success of the Cincinnati public markets is unquestioned, the city receiving an average net income from them amounting to \$1,000 yearly, and they make it possible to place all foodstuffs before the class of people who need them most.

There are three successful markets in Dayton, Ohio, one privately owned, and two owned by the city. Two of these are in the down-town district. The older is open on Tuesday, Thursday and Saturday, and the other on Monday, Wednesday and Friday. The down-town district also contains eight or ten squares, where curb spaces are auctioned off in May of each year, at prices ranging from \$15 to \$300 per year for each space. The income from these rentals is approximately \$30,000 per year, while the expenses are about \$2,600, thus giving a good profit to the city. Prices are slightly lower than those of the stores, and the produce is always clean and fresh. The markets are supplied from the immediate country, and no shipments from other communities are received. Commission men are friendly.

In Detroit, Mich., there are two markets, both owned by the municipality. They are a success because they have been successfully operated for many years. The market master gets a salary of \$900, and the total expenses of the two markets in 1911 were \$6,474. Neither market is "inclosed," each being nothing more than a cement foundation, with a raised walk, forming a cross in the centre of a square city block, the walks being about 60 feet in width, to which all wagons back, permitting the customers to pass around, examine the products and ascertain the prices. These walks are sheltered by roofs. There are no booths or stands, and there appears to be the nearest approach to direct marketing from the producer to the consumer.

Grand Rapids makes the claim of having the largest wagon market in the world. Not only self-sustaining, but a profit maker. It is owned and operated by the municipality. The market master receives \$1,000 per year, and the annual expenses of the market are about \$4,000. The stall rents are from \$5 to \$25, of which there are 760, and 372 were rented in 1912. Farmers using the market number from 100 to 200 per day, paying a daily entry fee of 25 cents. The commission men are friendly and co-operate. Goods are shipped in from other localities during out-of-season periods, these being fruit and vegetables. The total annual income approaches \$10,000 a year, and every effort is made to attract.

The public market of Hamilton, Ontario, is owned by the city, and is governed by rules and regulations issued by the city council. The market clerk receives a salary of \$1,900 per year, and secures his own help. In addition to this expense is that of the caretaker, who receives \$720, and repairs amount to from \$300 to \$1,000 annually. This market is kept strictly for farmers and butchers. During the busy season it is patronized by from 300 to 600 wagons in one day. No shipments from other communities are received, and *nothing is sold in the market except the produce grown by the farmers*. Prices are controlled by supply and demand.

New York now has under its jurisdiction six public markets, one of which, and part of one are uncovered. These are open squares restricted to farmers and gardeners' wagons. There is no restriction upon the farmer as to his customers, and the market is open from 9 p.m. to noon of the following day. One is in Manhattan and the other in Brooklyn. The maximum using each market square is 700.

Washington market is covered, 175 by 253 feet, and serves the down town restaurant trade. Fulton market is for fish, and is covered, 203 by 170 feet. Business is principally transacted with hotels and steamship lines.



West Washington wholesale market is covered, and deals in dressed meats and country produce. It is 389 x 400 feet. In and about this market the meat and poultry supply of the city is handled, and a very extensive business is carried on. Jefferson market is retail, with an area covered of 36,000 square feet. It is now in a business section and not well located.

Wallabout market is for general wholesale trade, with open square for farmers. It supplies the large and rapidly increasing residential section of Brooklyn. The matter of letting differs from all other city markets, the land being laid out in lots and averaging 20 by 50 feet, and leased for a term of ten years, with privilege of renewal. The lessees put up their own buildings which conform to a universal style of architecture and do not exceed two stories in height, giving the surroundings a very attractive appearance. The rental per lot is \$7 and upward monthly. It is located on the waterfront.

Oklahoma City has received much publicity owing to its establishment of a city market, which consists of stalls along one of its widest streets; 318 stalls are in use, extending along three blocks of the street.

Oklahoma is to-day experiencing the same feeling that has existed in all the cities where markets were opened; that is the importance of direct contact of producer and consumer.

In Vienna, Austria-Hungary, there are seven enclosed market buildings and about four open air market places. The buildings are large, well ventilated, with stone floors, and are kept scrupulously clean. All of the public markets are regulated by municipal ordinances, the article sold being provisions, agricultural products as well as all articles produced on farms, and other commodities in general use. The general supervision and management of the markets is in the hands of market commissioners appointed by the municipality. The aldermen decide what places are to be given up to public markets, and what wares may be sold in such market places. If there is a special market place for one class of commodities, then such commodities may be sold only in this one market place in larger quantities. The market hours are fixed by the board of aldermen, separately for each market place, and are posted there. At the wholesale fruit market sales are stopped at 2 p.m., though goods may be received there after that hour. The stands are assigned to dealers according to their priority of application. Dealers are permitted to sell larger quantities of wares in original packages, but any contrivance whereby the purchaser is misled concerning the real contents of the packages, is strictly prohibited. The products intended for sale reach the market either by rail, wagons or boats. There are stationary and portable stalls, the latter being removed after the closing of the markets. The total receipts from the markets were \$382,508, and the expenditures \$321,412, the profits being therefore \$61,000 a year.

In Berlin, Germany, public marketing is carried on in 14 city market halls, located in places convenient for trade. Halls No. 1 and 1a adjoin, and form the central and principal market hall. Both have direct connection with the Berlin city railway, and have extensive sidetracks and unloading platforms and sheds. The general administration is in the hands of the municipal deputation, composed of five aldermen and ten selectmen, but the immediate control and management is in the hands of a managing director. These halls are well ventilated. The floors and walls are of cement or brick and a strict police inspection insures cleanliness. A bright, airy room is set apart as a sort of hospital or rest room, to which persons becoming suddenly ill or tired may go. Markets in the suburbs are held twice a week in certain open spaces set apart for the purpose. Stand space is rented from an official appointed by the city, and stand renters furnish their own stand material, which must be removed when the time comes for closing. In bad weather the dealers provide an awning to cover their space. During the fiscal year 1907-08, the total receipts were \$835,256. The total expenditures were \$699,937, leaving an excess of receipts over expenditures of \$135,319.

All the public markets of Amsterdam are owned and operated by the municipality. The city is divided into five districts, each of which is in charge of a director. The principal markets are those for vegetables, plants, flowers, fish, cattle, eggs and other articles, and several of these are in the most populous districts. The egg and fish markets are those under cover. The others are either in large open squares set aside for the purpose, or run along the middle of the streets or alongside the canals. In the year 1907 a net profit was made of \$36,959.

In the Commune of Brussels, Belgium, there are four covered markets and numerous open air market places, all managed by the municipality. Merchandise arrives in all sorts of conveyances and prices are regulated by supply and demand.

Bordeaux, France, has seven covered markets, divided into two classes. The first give facilities to consumers to purchase direct from producers, and the second are conducted by retailers or middlemen who buy at wholesale, but both were built and are operated by the civic authorities. The entire structure of one market is of iron, the metal roof being in part glass covered, to light the floor space of the interior. It is an airy, graceful edifice, open on all sides, and protected from the sun and rain and snow by canvas curtains, raised or lowered by pulleys and ropes. Street cars pass through the building along this thoroughfare. In the wide portion of the street hundreds of stands are placed during market hours, and a scene of swarming activity presents itself.

One of the interesting features of the central market at Lyons, France, is the auction market, where an auction sale of food products is held every morning, and often twice a day. It is provided by law that all products sold at auction must come from outside the city. This prevents dealers about the city from making the auction department a dumping ground for their surplus and stale stocks. All commodities must be offered in lots supposed to be superior to the wants of a retail purchaser. During the auction the market women and the keepers of small stores replenish their stocks. This market is most emphatically favourable to the poorer classes. Many poor people band together and bid on a bunch of game or fish, dividing the expense among themselves, and thus procure luxuries they could not otherwise enjoy.

The system of public markets through which the people of the French metropolis, Paris, are supplied with fresh food materials, is one of the most extensive and carefully administered of its kind in Europe.

The dominant unit of the markets of Paris is a vast establishment in the central part of the city, near the Louvre, occupying an oblong space of 22 acres in area, that cost \$10,000,000. In this vast entrepot the various supplies are received by rail, drays, vans, boat on the Seine river, or by great wagons from the country, and are classified, inspected and sold by auction, bargain and sale to retailers and consumers throughout the city. A majority of its pavilions are reserved exclusively for wholesale trade; in the others sales in ordinary quantities are made to consumers. The products sold at wholesale are purchased by marketures, who in turn sell from the thirty-three smaller public markets which are located throughout the city and to the numerous stores.

Underneath the pavilions of the central market are immense cellars for the storage of produce, the space of which is divided into sections and used by vendors, the same as the spaces and stalls on the main floor. Thus organized and intelligently administered, an abundance of various supplies may be received, inspected, weighed, stored and sold so efficiently as to preclude unwholesome food and prevent extortion and trickery. In the financial report of the municipality the total revenue for 1906 was \$1,817,164, the total expenses \$318,923, leaving a surplus of \$1,498,241.

The most important markets in Marseilles, France, are used for the sale of fish. At these three elements of cost enter into market transactions: (a) The percentage on the sale of fish at wholesale; (b) The cost of space devoted to market purposes; and (c) The payment to the sworn weighers. The greater part of the fish shell-fish

and sea produce, is brought to the quays near the wholesale market by the boats of the fishermen's society, and thence carried directly in baskets to the place of sale. The market garden produce is principally brought in carts from the surrounding country, which arrive in great numbers in the early morning. These carts start usually long before dawn and return late in the evening.

The cost of transporting this merchandise is almost entirely a question of the producer himself bringing it to the market. That which arrives by train is disposed of to the stores which deal in the more expensive articles of food. The sellers in the market are almost invariably women.

Munich, Germany, with a population of half a million, about the size of Toronto, has the most modern of all European municipal markets. It was opened in February, 1912, and embodies the improvements suggested by experience of market administration in other cities. The total cost was \$797,000, and the whole establishment covers 46,500 square metres. At the northern extremity of the building is the toll and receiving department, where produce is delivered at special sidings connected with the south railway station of the city. Next comes a succession of halls with covered connections, terminating in a small retail section and the administration offices. At the northern end of the great market is a section where express delivery traffic is dealt with, while the western side is occupied with sidings for loading produce sold to buyers from other German centres. Below the toll house and the market generally, are vast cold storage and refrigerating plants for the preservation of food supplies till the demand in the market above calls for their delivery. Each market hall is devoted to a separate section of produce, and the cellars below correspondingly distinct, so that there is an absence of confusion, and rapid deliveries facilitated. Across this underground space from north to south run three roadways, while down the centre, from east to west, a further broad aisle is provided, with an equipment of great hydraulic lifts. There are nine of these elevators allowed for heavy consignments, while "each stand owner in the market has, in addition, a small lift connecting his stand and storage cellar."

Both market halls and underground cellars are so constructed as to facilitate ventilation and complete cleanliness. The floors are of concrete and every stand is fitted with running water, with which all the fittings have to be scoured every day. There is both roof and side light and ample ventilation, while the entrances are well secured to prevent dust and keep out flies. Electric light is used underground, and the cellars are inspected as strictly as the upper halls, to ensure due attention to hygiene.

In the centre of each market hall there are offices and waiting rooms for those using the markets. In the restaurant 150 at one time can be served with meals, or they can be accommodated with seats in the garden.

Associated with this market establishment is a great cattle market and range of slaughter houses on a neighbouring site. The live cattle market dates back for centuries, but the present accommodation was only completed in May, 1904, at a cost of \$1,600,000. As in Berlin, extensive bath rooms are provided for the slaughter-house staff, and baths are available at nominal charges. Though the new market halls have not been established long enough to provide a definite financial statement, the live cattle market and slaughter houses do "afford an indication of the success of municipal administration" in Munich. Last year the income was \$416,500, and the expenditure \$410,100, thus showing a profit of \$6,400. The new produce halls are certainly the best equipped in the world, and the only "element of doubt" as to their continued success arises from the fact that "three-old-fashioned open markets are nearer the centre of the city," and for that reason are even now preferred by many. This fact emphasises the great importance of selecting a suitable central position in establishing a municipal terminal market.



The markets of London, Eng., are mainly wholesale depots to which the producer or importer sends his product, to sell to the tradesmen. The only semblance to retail markets which exist in London are the informal markets, established by the costermongers in the public streets, and these are unauthorized except by custom. The city has established and maintains nine great markets of the type already referred to, but in addition to these there are privately owned depots as follows: Covent Gardens, for vegetables, fruits and flowers; Spitalfields, for vegetables and fruit; The Borough, for vegetables and fruit; The Great Northern Railway Co., for potatoes; The Midland Railway, for potatoes and vegetables; The Columbia, for potatoes; Shadwell, for fish; Portman, for general produce; Greenwich; Woolwich; Whitechapel, for hay; Cumberland, for hay; and The Hide and Skin Market. As will be noticed, private interests are strongly represented, and this makes London differ in one striking particular, from perhaps every other important city.

The nine markets of Birmingham, Eng., under direct municipal control and management, are admirably administered in every detail, and a source of considerable profit to the city. Excellent facilities are provided for market purposes, and the markets are a pride to this great industrial centre of a million people. The city itself has a monopoly of market rights, which it guards most carefully, permitting no rivalry, and so arranging affairs that the establishment of rural private markets is out of the question. Besides those who have regular stands for which they pay a prescribed rent, based on the number of square yards occupied, are the so-called casual market people, who come twice a week on regular market days. Quite a number of these are regular in attendance and have the same location without being granted any legal rights to their positions.

The direct management is under a superintendent, who is paid \$1,460 a year and house rent, coal and gas free, which makes the salary practically \$1,525.

There are six markets belonging to the corporation of Liverpool, England, and their management is in the hands of an official, who is designated clerk and superintendent, and this official is responsible "to the committee for their government." The system of letting stalls is by tender. When premises become vacant they are billed to be let and offers are invited. A large proportion of the vegetable products offered for sale at the markets is grown by market gardeners and farmers residing within a radius of 15 miles from Liverpool, and these products are brought to the markets by the growers, so that customers have the advantage of supplying their wants direct from the producers.

The public markets of Belfast, Ireland, are under the control and direction of the markets committee of the city council. To the eastward of St. George's, the principal market, is a large, open space of several acres, which is occupied as a general market for farm produce. Every market day it presents an animated scene, dozens of farmers having come in with their carts loaded with produce. Cattle, pig and horse markets adjoin, and there are two large sale rings for the exhibition and inspection of animals.

Produce is brought by means of carts to the Edinburgh, Scotland, market, some of which come direct from the market gardens in the neighbourhood of the city, while others convey the produce from the city railway stations. These carts remain in the market house during the market hours, and the produce is sold from the vehicle. The stands in the market house are allotted by the gardeners and other frequenters, among themselves, once each year the allotment being subject to the approval of council. Stalls have been fitted up in the gallery of the building. Revenue is derived from dues, stalls, stands, poll tax, New Year carnivals, shows, Saturday evening concerts, refreshment rooms, cellars for storage, and the use of lavatories. In 1908 receipts exceeded expenditure by \$14,454.

The city of Glasgow is reputed to have one of the most advanced municipal governments in the world. It has seven markets. They are the cattle and horse bazaar, the meat market, the fish market, the cheese market, the clothes market, the fruit



market, and the bird and dog market, all of which are under the management of a committee composed of the Lord Provost, three magistrates and fourteen councillors. Each market is situated in the part of the city best adapted for its purpose and the convenience of the public. The buildings are solid stone structures, in keeping with the buildings in general throughout the city, and the management and control of the property and affairs is of the high order for which the corporation is noted. The old clothes market is a unique institution, patronized almost exclusively by the flotsam and jetsam of the city and district, and is said to be of considerable value to poor people.

Great intelligence and care have been manifested in devising a comprehensive, workable system, which was devised as a result of a report furnished by a deputation which visited markets and slaughter houses on the continent.

The receipts for the year ending May 31, 1908, were \$233,686, and the expenditures \$209,988, showing a profit of \$13,698.

It is generally conceded by those who know Toronto, that in all probability it will be the largest, wealthiest and finest city in the Dominion of Canada within the next twenty-five years. One obstacle at least stands in the way of more rapid advancement, and that is the abnormally high cost of the necessities of life. When one considers the unusually fertile land with which the city is surrounded, within a radius of 50 miles, and when you compare the price of food products in the various towns and villages in this area, it is readily seen that something ought to be done to moderate the higher prices. The statement is often made that a man should not be blamed for trying to get as much as he can. Is this theory right? Is it not a reversion to paganism when the conservation of human life is involved? Old-fashioned business men considered it wrong to ask more than an article was worth, or to buy at a price less than it was worth. And especially is this true in so far as food is concerned. Common humanitarian feelings at least should force a man to provide food for the masses fresh and good in quality, at the lowest possible price. Particularly reprehensible and unchristian is the cornering of food supplies for profit. Producers and dealers should curb their desire for large profits. In the end they will feel more comfortable with gains perhaps more slowly made, but gathered by considering others as well as themselves. Producers who desire access to the markets of Toronto must remember that they pay no city taxes, have insignificant market expenses, no telephone, no delivery, and get cash, and that they should easily be able to save consumers from 25 per cent to 35 per cent. Citizens will not purchase from producers if they cannot effect the saving to which they are entitled.

In almost every city to which reference has been made, storekeepers are generally neutral on the market question, and have discovered that there is plenty of business for all, and that properly managed markets greatly increase the volume of trade for them and others in any city, especially in the trade centres that form around them. In villages and towns and smaller cities, the most desirable and eagerly sought location for a grocer's store is next to the market, or at least near the market square. Markets do not interfere with telephone trade, or draw away those who expect delivery. A little consideration of the whole proposition should make these merchants ardent advocates, as some in Toronto have become. The trouble is that this line of trade, as well as other lines, have become affected by the general purpose, not of gaining trade by doing the service most economically, but of getting as high prices as possible by the suppression of competition. Markets regulate and compel fair and reasonable prices to all.

The consensus of opinion seems to be that hucksters and peddlars add from 10 per cent to 25 per cent to the cost of food, and are in part responsible for the exclusion of farmers from St. Lawrence market. Of course these men have a right to the free exercise of their calling, but the methods of selling are answerable for fly-tainted, dust besprinkled, withered, germ laden produce. It would be better for the citizens,

as well as themselves and their families, if they were to become producers, by taking up land and thereby join with the farmers and vegetable growers in the great movement for better and cheaper food.

Students of the market question affirm that these marts, to be an all round success, must be of natural, steady growth, and in response to public demand. If this is so, it follows that the citizens must be educated and enlightened as to their value and effectiveness in lowering prices to a normal level. Incidentally here is a great work for the newspapers. If they are the champions of the toilers, the friends of the workers they claim to be, and have the courage of these convictions, they will at once become strong supporters of municipally owned pure food depots. They can do this by comparing prices in Toronto with those outside, by telling of successfully operated markets in other places, and by constantly giving favourable publicity to such civic enterprises. The question of expense is sometimes offered as an objection to the establishment of markets. There is no necessity for lavish expenditures. Some of the most successful in the world are in the open, or have buildings of the simplest description, made of structural steel, with cement floors and foundations that are little more than shelters. Sufficient land is of more importance than buildings. The St. Lawrence market cost a considerable sum of money, and it is a fine edifice, but a vast amount of useless ceiling vacuum accounts for an expenditure that would provide a half-dozen of a different and yet effectual type.

If the market question is not dealt with soon there is a possibility that privately owned markets may be introduced by aggressive men, with an eye to large profits. If this were to occur it would be regrettable and be more or less of a blow to public ownership, civic control of the necessities of life, and the suppression of high prices. It would also deprive the city treasury of attainable profits.

Some persons oppose markets here by pointing to St. Lawrence market, and saying that it has not been a success. So far as can be learned it has not yet had a chance. It was tacked on to the Property Department, and regarded more or less as a troublesome encumbrance. It has always been without the master mind of a market expert, and no business institution can succeed or be a **profit producer** with a thoroughly qualified head right on the spot.

If from any cause the food supplies of Toronto were cut off, for how long could our citizens be fed? An emergency may never occur, but nevertheless such a possible contingency should be thought about and some suitable provision made, in which ample supplies may be constantly available. The establishment of the Municipal Abattoir will give a storehouse for the various meats, and should be of great value to the citizens. The erection of suitable food storehouses, if not taken up by the railways, should receive some consideration from the city.

What other people have done surely the intelligent people of Toronto can also do, and excel the accomplishments of others. As an incentive the following reference is made to the experience of another municipality: "A municipal market as a possible method of reducing the cost of living, has been tried within the past few months, and this without any great expense on the part of the city on the construction of buildings, but simply by an endeavour on the part of the mayor to bring the consumer and producer together in the simplest, which is the best way possible. The market was started on the edge of a public square, without any preparation whatever. The papers were asked to invite the people from the country to bring whatever they happened to have to sell. The first day a few people came, many to look on. Next market day a greater number were on hand, and after that a double row of wagons and stalls were on the market for the length of two blocks. During the holidays this was augmented by a single row for the length of one block around the city square. The prices of articles sold upon the market have been substantially reduced; meats, for instance, from one-fourth to one-half. The market has been a wonderful success, and the producers see

the advantage of this system and are going to make a special business of raising supplies for their near-by home market. From one thousand to three thousand people are buying fresh, pure, clean food at a reasonable price. In the interests of the peoples' health, happiness and pockets, no less than in consideration of municipal finances, all should rally to support those who are seeking to secure the consummation of this urgent reform, at the earliest possible moment consistent with a full consideration of all its aspects."

If we extract from what has been written in the foregoing what is pertinent to conditions in our city, we shall find that relief apparently lies in dealing with at least four problems. In the first place it will be necessary to increase the food supply. The suggestion has been made that vacant land now lying idle in and around the city, should be leased at a nominal rent to those willing to cultivate it. Others are that the Ontario Government should provide seed, plants and fruit trees for all producers of table foods at specially low prices; that the government should make a strong endeavour to procure an ample supply of farm and garden labourers; that every encouragement, by way of prizes and even bonuses, should be offered to improve live stock of every description; that the slaughter of young stock should be stopped for a term of years; that good roads and better railway facilities should be insisted upon; and that the Noxious Weeds and Insect Pests Acts should be really enforced.

In the second place comprehensive steam and radial freight services should be devised, and steps taken to impress these needs upon the Ontario and Dominion Railway Boards, with the object of obtaining speedy relief. These lines should radiate out from the city at reasonable distances apart, "fan-shape," to the outlying districts. It has been demonstrated that cheap distribution is in a large measure a solution of the problem, and as a consequence re-routing of the present surface railroad, uniformity of gauge and a suitable tube system to the water front are indispensable. In addition the development of water carriage should be no longer delayed. The possibilities of our harbour and shipping are just beginning to be realized. In these we have facilities for cheap communication with every part on the lake and the wonderful Niagara fruit district. The improvements in motor boats may produce a type of craft that will revolutionize the carrying trade for moderate distances, in so far as speed and cheapness is concerned, and place what is possibly the greatest fruit belt in the world at our front door. Every encouragement should be given the Harbour Commission in their work of providing modern docks, with complete machinery for loading and unloading.

In the third place, it has been shown that suitable terminals are required in close proximity to and connection with wholesale and consumers' markets. A sine-qua-non for a successful retail civic market may be expressed in one word "land." Many have made the mistake of spending extravagant sums unnecessarily in elaborately constructed buildings, and this we must avoid. In some districts a good market can be established by simply widening a street for a block or two where land is cheap, and building a neat, light shelter of structural steel, two hundred feet long, by 50 feet wide in the centre of the highway, or a depressed piece of rough, broken ground can be transformed into a serviceable market place at little cost.

So far as present judgment goes, in addition to the St. Lawrence market and the St. Patrick's market, which should be retained, reconstructed and developed, necessity apparently exists for the establishment of a large, commodious, inexpensive wholesale market, absolutely under municipal control, on the Harbour Square, close to the boats, and at the exit of the underground tube railway from North Toronto, with trackage facilities in connection with it. Local farmers' markets might be located perhaps, with advantage, near (a) the subway, on Queen St. W., in Parkdale, (b) near the C. P. R. station in West Toronto, (c) Earls court, (d) near the C. P. R. station on North Yonge St., (e) near the corner of Broadview and Danforth Aves., (f) near the Woodbine, at the corner of Kingston Road and Queen St. East, or at points selected after careful consideration.



In the fourth place, the successful carrying out of these suggestions depends on "a man," known in market parlance as "The Market Master." His must be the master mind, and he must be chosen solely for merit, and well paid. He must be a genius for broad constructive work, possess experience and tact, an inflexible courageous will, and well directed enthusiasm. Upon him should all the responsibility be placed, and he should be employed with the distinct understanding that the institutions under his control are expected to be revenue producing.

This study has been written for the use of the Transportation Committee of the Corporation of the City of Toronto. It is for their information, and to form the basis of a discussion with the hope that it will be of some assistance in helping them to solve the weighty matters with which they are to deal, and that possibly it may contain the germ that will ultimately develop into the panacea for which the citizens are waiting.

The information contained in these pages was largely obtained from the following, to whom acknowledgements are given: The American City U. S. Consular Reports, The Press, New York Food Commission, Clyde Lynden King, Ph. D., City of Cleveland Report, Mrs. Elmer Black, N.Y.

## XX.

### STOCK YARDS, ABATTOIRS, REFRIGERATION.

The campaign of education which has been going on for the past year or more for greater attention to mixed farming and cattle raising is beginning to have some effect.

In the west a surplus of hogs is expected this year, and of cattle in two or three years.

To meet the situation arising from increased production of live stock and to aid in securing effective competition in the sale and shipment of live stock and meats, there is a growing demand to provide addition facilities in the matter of stock yards, abattoirs, and refrigeration, viz.:—

(1) Stock yards, abattoirs and packing plants, at large trading centres, under public control.

(2) A sufficient supply of refrigerator cars.

(3) Refrigeration on steamers, for the export of chilled meats and perishable products to the United Kingdom.

The Board of Inquiry regards these facilities as necessary and of the highest importance in securing and maintaining increased production of live stock and meat products and would recommend that increased attention be given to the question of marketing live stock involving the time of marketing, methods and rates of transportation, care of stock, and shipping and receiving stations, and the storing and distribution of meat. It appears to us as a result of our inquiry that live-stock production is of the greatest importance to the life of Canada.

## XXI.

### MIXED FARMING—LAND SETTLEMENT.

Western students of affairs are beginning to pay a great deal of attention to the relations between the man on the farm and his fellow in the city. Those who have the interest of the country at heart realize that Western development will not reach its highest until the rural and urban dwellers come to see that their interests are co-ordinate. An ideal condition would be to have the growth of the city and country keep pace.



The lure of great centres has drawn people off the land in the older provinces and has kept new land from being settled in the West. It is the very essence of the high cost of living and unless counteracted is the precursor of a very undesirable state of affairs generally.

Leaders in the agricultural schools are now discouraging the idea that a farmer can grow wheat alone and live, and are impressing upon students the advantages of having live stock on the farm. They are preaching the doctrine of mixed farming. Dr. J. G. Rutherford is quoted as saying at North Battleford:—

We have gone into the extensive occupation of land and not for the intensive farming of it. Western farmers are losing large sums of money by selling their wheat and exhausting the soil, instead of feeding their grain to stock. The man who tears up a few thousand acres with a steam plough, seeds it, waits for results and spends his winter in California is a gambler and not a farmer.

In Appendix No. 43 there is inserted a copy of a printed pamphlet by Mr. J. H. Menzies, F.C.A., of Winnipeg, on "The Economical Condition and Resources of the Canadian Middle West," from which we make the following extracts:—

Whenever the subject of the resources of this Middle West—of what we produce—is mooted, when we look for what means we have to pay our way, the mind reverts at once to our wheat fields. We have other products than wheat; the oat and barley crops last year were of the value of 90 million dollars, and we have flax, fish, minerals, the timber that skirts our prairies, and many other things; but the market value of all these products together is less than the value of the wheat; they do not bulk so large to the mind nor so strike it as of the first importance.

This foremost place of wheat in our produce has come about from the good prices once obtainable for it for local consumption. But when under such favour it was grown in great quantity it became necessary to export the excess, and this came into competition in the British market, beside American wheat, with the wheat grown by peasant labour in Russia, India, Egypt and Argentina. The price of their greater quantity of wheat then ruled the price of ours, and the return therefore for our higher priced labour became as low as theirs; though this effect was obscured to us for a time by the accident of good prices for wheat in Britain.....

Before all things—and this is the conclusion of the whole matter—the productiveness of the land somehow should, as it may, be increased. A note of doubtful value indeed would attach to the land if the result from such farming as obtains must continue always so poor. The Government statisticians cited above state the total yield of wheat for all Canada in 1913 at 232 million bushels, of the value of 156 million dollars, from a cultivated area of 11 million acres, and the share we in the West take in this wheat culture is evidently too preponderant in our farming. The wheat crop of the three prairie provinces was nine-tenths of the total wheat crop of Canada, whereas our oat and barley crops were each only six-tenths of the total for Canada. So that if our wheat crop had been diminished by one-third or 70 million bushels, it would still have borne the same proportion to the wheat crop of the rest of Canada as our oat and barley crops bear. (The continued preponderance of wheat growing in the West comes now no doubt from the easiness of cultivating our prairie fields.) But though the wheat crop may be increased in yield per acre, yet other branches of farming replacing it partly would pay better.

Homesteads have been allowed too freely to encroach on the ranges in the far West and crowd them out. Their cattle might otherwise by this time have

stocked all the farms, so cheapening meat for the whole country, whereas now, failing any adequate demand from the farms, the western ranges have to export much of their cattle to the south, and this causes scarcity and high prices to the consumer. This want mixed farming would supply; while also near every town and city there should be extensive market gardens and poultry and dairy farms, the want of which is another great cause of high prices in our housekeeping. With such agricultural resources at hand it is most wasteful not to produce enough of such things to supply our townspeople, but to be obliged to import them at a great extra cost from a distance.

The ideal is to make farm life more attractive and to set up an industrious and prosperous community of farmers who shall while farming better gradually adopt mixed farming where feasible.

An "agricultural survey" is one of the means recommended to carry out this ideal: so as to show, by means of maps, charts and information carefully tabulated, the characteristics of soil and climate in the various localities; also to indicate the kind of farming which is most suitable, what kinds of grain ought to be sown and other data useful for intending settlers.

In Appendix No. 22 there is inserted an article on "Cost of Production in Agriculture," and also an article on "Supply of Store and Dairy Cattle," as published in the *Journal of the Board of Agriculture*.

Outside the prairie provinces, the settlement of the land is a matter principally under provincial control.

The interests of the whole community are affected, however, so far as land settlement may tend to increase production and reduce the cost of living and in other respects.

Views presented to the Board of Inquiry in British Columbia are set forth in Appendix No. 41.

In the prairie provinces the information gathered from various sources pointed more particularly to the necessity for good roads, the desirability of having buildings erected for settlers on new lands—to be paid for in instalments—and to the need of facilities to provide farmers with "working capital."

The following information has been furnished in regard to the sale and settlement of Canadian Pacific Railway lands in Manitoba, Saskatchewan, and Alberta:—

#### GENERAL CONDITIONS OF SALE OF LANDS.

1. Lands are sold only to bona fide settlers.
2. Not more than two sections, 1,280 acres, will be sold to one purchaser.
3. Lands are sold on the basis of one-twentieth cash and the balance in nineteen annual instalments with interest at 6 per cent per annum. Purchasers who have complied with all the terms of their contract, after the expiration of five years, may make payment of the whole or any part remaining unpaid without notice or bonus.
4. The company reserves all mines and minerals, including gas and petroleum.
5. Applicants must, by themselves or authorized agents, make personal inspection of the land they propose to buy.

#### SALE OF LAND FOR SETTLEMENT WITHOUT LOAN.

1. Purchasers are required to enter into occupation within six months from the date of purchase.
2. Purchaser must undertake to build a house costing at least \$350 and a barn costing at least \$200 and capable of accommodating four horses and four cows.

3. Purchaser must agree to keep the buildings insured against loss from fire, and must undertake to sink a suitable well, fence the land and break and crop a stated area in each quarter-section.

4. Purchaser must undertake to keep during the entire period of his required occupancy of the land, at least three milch cows.

5. In lieu of cultivation and cropping of the land purchaser may agree to maintain on the land a stated number of horses, cattle, sheep or hogs. Such animals must be the unencumbered property of the purchaser.

#### SALE OF LAND FOR SETTLEMENT WITH LOAN FOR IMPROVEMENTS.

The \$2,000 loan to settlers is absolutely the strongest, most positive and convincing answer to any and all questions as to the quality of the Canadian Pacific lands, and as to the profits that can be made in farming these lands. Think of this—if a farmer purchases 160 acres of these lands at \$20 an acre, his first payment on our twenty-year terms is only \$1 an acre, or \$160 on 160 acres. Now, against this investment of only \$160 in the land, the Canadian Pacific is willing to prove its faith in the productiveness of the land by investing \$2,000 in improvements on this land. And this investment is made absolutely without any security other than payment of one-twentieth of the price of the land and the amount of the loan. Seeing this, can any reasonable man doubt that the soil of the lands offered is as rich or the profits that may be made are as great as the Canadian Pacific has always claimed they are? The conditions of this loan are:—

1. Applicants for land on this plan must be married men having agricultural experience.

2. Applicants must have sufficient capital to enable them to pay the first instalment of one-twentieth of the purchase price of the land they select and one-twentieth of the amount of the loan desired, in addition to the amount necessary to maintain their families for one year from the date of their entry into occupation.

3. Applicants must own free from encumbrances sufficient horses, cattle and other live stock, or have sufficient means to purchase same to enable them to go into occupation and proceed with the development of the land.

4. No application will be accepted for more than 320 acres.

5. The company will, within a reasonable time after the acceptance of the purchaser's application, expend a sum not exceeding \$2,000 for improvements to the land, including a charge for supervision of five per cent of the amount expended. Improvements will be made in the following order:—

(a) The erection of a house; (b) the erection of a barn; (c) the fencing of the farm; (d) the providing of a well, and pump.

6. The character of the house and barn to be erected on the farm to be selected by the applicant from the standard plans of houses and barns erected by the company. In the completion of these improvements the purchaser of the land, together with any stock and equipment he has, will at the discretion of the company be employed in connection therewith, and be paid the current rates for same. The cost of all material and work will be paid by the company and charged against the advance.

7. The total amount of the advance of \$2,000 will be added to the list price of the land and repayment of the same made in twenty equal annual instalments with interest at six per cent, at the same time and concurrently with the payments for the land as above referred to.

8. Purchaser must undertake to enter into occupation of the land with his family, if any, within six months from the completion of the improvements

by the company and must undertake to reside thereon continuously for five years, and to break, cultivate and crop certain stated areas in each quarter-section. He must also maintain, during such required occupancy on the lands, at least three milch cows for each quarter-section and must insure the buildings against loss by fire.

The advantages that come to the settler from this policy are many. Not only is he enabled to make a start with a much smaller outlay of cash than otherwise, but his family is also protected from any of the inconveniences generally incidental to establishing a new home. The cash he receives for helping in the improvement of the farm is always a welcome addition to his treasury and he is assured that the buildings on his land are of the class that long years of experience have proven best. The reduction in initial expense is considerable.

The following article from the Monthly Bulletin of Economic and Social Intelligence for July, 1913, relates to Home Colonization in Norway:—

For some years in Norway may be observed two increasing streams of emigration—one to foreign lands, the other from the country to the towns. An important feature in connection with this emigration is that more than two-thirds of the land surface is devoted to extensive farming for which many labourers are required. This want the Government is endeavouring to meet by internal colonization. An article on this subject appeared in the July number of the Bulletin of Economic and Social Intelligence published by the International Institute of Agriculture, Rome.

Internal colonization in Norway is based on a law of 1903 which established an Official Credit Bank, the Norsk Arbeiderbruk og Boligbank (Norwegian Small Holdings and Houses Bank), which grants loans for home colonization. Its capital is furnished by the State and consists at present of 10 million crowns. Its working capital is raised by bonds payable to bearer guaranteed by the State, the total amount of which must not exceed six times the capital. They are repayable in from 30 to 50 years from date of issue.

The bank accords two kinds of loans, the *brukslaan* for the acquirement of small farms and the *boliglaan* for the purchase or building of workmen's houses. A maximum interest of 3½ per cent is paid on the first; of 4 per cent on the second. To obtain either loan special formalities are required, varying according as the request is made by a local association or by a person who needs financial assistance. Of these formalities, full particulars are given in the article already mentioned. From 1903 to 1912, the Norsk Arbeiderbruk og Boligbank granted 11,579 loans amounting to a total of 16,098,430 crowns for the purchase of small holdings, and 8,142 loans amounting to a total of 11,161,057 crowns, for building. The total amount of interest paid during the same period was 3,632,384 crowns.

## XXII.

### AGRICULTURAL CREDIT IN CANADA.

Credit facilities are of the utmost importance to the farmer. The raising of immense crops, and live stock for the world's market is, in the final resort, dependent on the farmer being able to make the most of his opportunities by command of the requisite capital and by adequate use of labour- and time-saving machinery and transport facilities.



More especially in that portion of the Dominion to the west of the Great Lakes, the question of capital to be loaned at reasonable rates of interest for carrying on the operations of the farm stands pre-eminently in the front rank.

That the production of live stock and other farm products has been retarded or diminished through the lack of organized credit facilities for farmers' requirements, is the view widely and firmly held, particularly in the western section of Canada, and thus constituting an important factor in the increased cost of living.

The Royal Commission appointed in Saskatchewan has presented a comprehensive and searching report on the whole subject of agricultural credit. The commissioners recommend the establishment of a co-operative mortgage association, covering the whole province and controlled and secured by the Provincial Government. Its object is "to facilitate on the part of the farmers of the province, the establishment upon a sound basis of a system of local and central rural co-operative societies, for purchasing and selling farm products and supplies."

A synopsis of the report of the Saskatchewan Royal Commission on Agricultural Credit is submitted herewith as Appendix No. 31.

A bulletin of the Department of History and Political and Economic Science in Queen's University, Kingston, Ont., on "The Problem of Agricultural Credit in Canada," by H. Michel, is also submitted in Appendix No. 30.

A memorandum on the subject of Cattle Loaning Companies, submitted herewith as Appendix No. 29, has been prepared by Mr. Coats from information obtained on a visit to St. Paul, Minn., in connection with this inquiry.

Special attention is directed to this memorandum, as pointing out an effective method of encouraging the raising, and particularly the feeding and finishing of stock by farmers.

The work of the Special Agricultural Credit Institution of Italy, 1913, reported in the Monthly Bulletin of Economic and Social Intelligence, October, 1914, appears as Appendix No. 32 hereto.

## XXIII.

### REGULATION OF INDUSTRY—BUREAUS OF INFORMATION— UNEMPLOYMENT.

Unemployment causes distress and leads to increase in commodity prices through decreased production.

The unemployed man is injured by idleness, his skill deteriorates, his "zest of life" is weakened, and his habits of thrift are soon on the down-grade. The habit of asking assistance grows by indulgence.

Under our present social organization periods of unemployment seem inevitable. There is a constant alternation of booms and depressions in our present system.

Times of prosperity are followed by depression and distress.

When the market is good, every productive machine is at work, and goods are piled on the market with reckless disregard for the future.

There is little effective attempt to gauge capacity or consumption or to ascertain where the balance between supply and demand is fixed.

Lines upon which there may be some reconstruction in our social system are now being studied in various countries.

A convention of Farmers' Institute workers was recently held at Washington for the discussion of various subjects of common interest.

It was there stated that the American Government is about to establish a station where the producers and consumers can obtain information with regard to buying and selling farm products.

Good service can no doubt be rendered by the establishment of stations or bureaus where reliable information is furnished regarding employment and wages, and also as to prices, supply and demand in various products of the soil and industry.

There is a group of people who advocate a price-fixing industrial commission with power to fix food prices at a point that will bring reasonable returns on the investment, and with power as well to prevent abuses in weights and measures and quality. But as schemes of price regulation of foodstuffs by an industrial commission offer little hope of immediate adoption, they cannot be looked to as a remedial agent for the present conditions.

Arthur Shadwell, in his book on Industrial Efficiency, writes:—

“The industrial expansion of Germany presents another picture. The industrial population has not been left to carve out its own destiny, but has been guided and helped at every step. All sections of the community, from the throne to the workhouse, have contributed something. ‘Laissez faire,’ or ‘Manchesterism,’ as they say in Germany, is dead; ordered regulation is accepted and applied with infinite pains by the Legislature, government departments, municipalities and private citizens. It is seen not only in the scientific tariff, but in the careful and judicious factory code, the State system of insurance, the organization of traffic and transport by railway and canal, the fostering of the mercantile marine, the educational provision, municipal action and poor-law administration. So the edifice has been built up four-square and buttressed about on every side. It is a wonderful achievement in which every unit has played a part.”.....

An article from the Monthly Bulletin of Economic and Social Intelligence, for October, 1914, on “The Problem of the Economic Distribution of Agricultural Products in the United States” is submitted, without comment, as Appendix No. 40.

## XXIV.

### THE CUSTOMS TARIFF.

The purpose of a protective tariff in Canada, as represented by its advocates, is to maintain an industrial system which shall keep Canada independent, shall make adequate use of its natural resources and diversify the occupations of the people, at the same time providing revenue for our national requirements.

The protection afforded by a tariff undoubtedly stimulates industries and tends to increase production.

One of the objects of a protective tariff system on this continent is to maintain a wage scale and standard of living above that found in other continents. This element in the system tends to increase the selling price for commodities in the home market, subject to modification in prices according to extent of production. By securing a remunerative home market, Canadian producers expect to sell a portion of their products abroad, although at a lower rate than they otherwise could, and so increase their output to its highest economic capacity.

The Customs tariff is a *tax* paid in part by the consumer and in part by the exporter, according to the conditions of trade.

Taxes, however, are needed for revenue purposes, and it is a matter of controversy whether such revenues are best raised by one form of taxation or another.

Customs taxes cannot be abolished without provision for other taxes to take their place.

Whether any other practicable and satisfactory system of taxation can be found to replace the Customs tariff system is an unsettled question. It is to be remembered that political economy is not an exact science, and that an investigation into the

ultimate economic bearing of protection and free trade, for practical purposes, must take into consideration the question of unemployment and other factors bearing on the welfare of the community as a whole. Writers on this subject contradict each other, and they in turn are contradicted by events.

It is undeniable that protection with its corollaries does give the protected competitors a great immediate economic advantage over unprotected ones. Whether this pays or does not pay a protecting country as a whole, or in the end, is a question which we leave to the controversialists.

That the tariff is not the cause of the present advance is shown by the fact that the greatest advance has been made in commodities which are least effected by the tariff and on which the tariff rate has not been raised during the period of increased prices.

The advance in 1913 as compared with 1897, by groups of articles, was as follows:—

	Index No. 1897.	Index No. 1913.	
Textile and other manufactures, 172 articles.....	92·9	133·7	Advance =44 p.c.
Imported foods, 17 articles.....	90·5	110·7	" =22 p.c.
Products of the farm, crude, 39 articles.....	86·3	142·3	" =65 p.c.
Products of the farm, manufactured, 30 articles.....	89·9	145·7	" =62 p.c.
Products of the forest, raw.....	98·4	174·6	" =77 p.c.
Products of the mine, 12 articles.....	86·5	126·1	" =46 p.c.

## XXV.

### GOLD PRODUCTION—SUPPLY AND DEMAND.

The price of a commodity is the value or purchasing power of that commodity expressed in terms of money. Money is the common medium of exchange.

The money with which exchanges are made consists of: (a) gold in circulation, and (b) credit money based on gold, and on other forms of property deposited in the banks, the latter usually taking the form of bank-notes, cheques, and bills of exchange.

The rule holds good that the prices of commodities are affected by the general law of supply and demand—subject, however, to other influences.

As gold is a medium of exchange and is the basis of credit, the increase in the gold supply has obviously an important influence in raising the prices of commodities and services in general, "other things being equal."

The extent of this influence is a disputed question, but that it has had a considerable effect in raising the price-level of commodities seems apparent to us.

As the general advance in prices has been world-wide and not confined to any one line of industry, with here and there an exception, there must be some general cause tending to raise prices.

A cause which will affect all prices in civilized countries in much the same way is a cause that has to do with a standard of measurement of prices.

There can be no question that there has been this general increase in prices, and that at the same time there has been an increase in the output of gold, the monetary standard of the civilized world, sufficient to decrease materially its value as compared with the values of other goods, and in consequence to increase prices.

The following are extracts on this subject from the report of the Director of the Mint at Washington, U.S.A., for the fiscal year 1911:—

#### THE WORLD'S ABSORPTION OF GOLD AND THE RISE OF PRICES.

The enormous increase in the production of gold which has occurred in recent years, and the relationship that may exist between these enlarged supplies and the advancing prices of commodities, has awakened a world-wide

interest among economists. It has seemed for this reason worth while to undertake the task of tracing the yield of the last two decades into actual use for the purpose of discovering where it has been located, and how much of it has been placed where it would probably exert an influence for the expansion of credit, the stimulation of industry, and the rise of prices.

The new golden era may be said to have had its beginning with the discovery of the Transvaal deposits in South Africa and the development of the cyanide process, which was first used successfully in the treatment of the Transvaal ores, but has since contributed in an important degree to the increased production of nearly all gold-mining districts.

The introduction of the cyanide process was an epoch-making event in the history of gold production and must be taken into account in any well-considered review of the gold-mining industry. Recently the suggestion has been made that some kind of a memorial should be provided in the Transvaal to Messrs. McArthur and Forrest, who originated the process. In a published letter making this proposal a prominent resident of Johannesburg says:

"It is many years ago since mining men, if my memory does not play me false, were confronted with the problem of how to win the gold from the pyritic ore which the mines were found to contain when the red free-milling ore changed to blue hard rock, from which the gold was not easily obtainable with the then existing methods of gold winning. The advent of the McArthur-Forrest process was a wonderful piece of good fortune for these fields, and there are men still in Johannesburg who know all about it from the very beginning, and others competent to place on record the history of the process are in England or Scotland, and it has often seemed to me that in the rush of life we have to all intents and purposes, failed to remember how the Rand was saved by the cyanide process."

The *Mining World and Engineering Record*, of London, commenting upon this proposal, says:—

"The discovery of the cyanide process must be regarded as one of the greatest achievements of modern times. And there can be no doubt that cyaniding will be hailed by coming generations for its importance, not so much to the mineral industries directly, as for its bearing upon world economies in rendering possible a greatly increased output of gold and silver year after year. In the comparatively brief 20-year interval since 1891, when Messrs McArthur and Forrest brought the modern perfected cyanide process prominently before the mining world the output of gold has amounted to 284,081,289 fine ounces. This is a most astonishing showing, especially when compared with a total output of 401,311,148 fine ounces for the entire 397 years previous—from 1493 to 1890.

"For the great expansion in the world's output, particularly noticeable in the past 15 years, the spread of the cyanide process is directly responsible. Nor, if we except the Klondike, has this record production been boomed by the development of new fields. The cream of the world's gold fields had already been skimmed in previous years in California, Australia, South Africa, Siberia, India, and elsewhere. It is mainly on the cast-off leavings of the old fields that the cyanide process has achieved a record production of the yellow metal. And among those leavings, we must not forget the innumerable lower-grade properties whose exploitation has been rendered fundamentally possible only by the cyanide process. It is these latter which now furnish the bulk of the world's supply of gold, and upon which the world must depend very largely for its future requirements."



The total production of the Transvaal from 1884 to June 1 1889, was reported by this Bureau in 1889, at \$11,037,676. During the decade from 1880 to 1889, inclusive, the production of gold in the world was lower than in any other 10 years after the California discovery, the annual average for the period being estimated at \$106,250,000. In 1888 the output was \$110,000,000; in 1889, \$123,000,000, and for the next 21 years as shown below.

The production of the world for the ten years from 1890 to 1899, inclusive, and for the eleven years from 1900 to 1910, inclusive, is given in separate tables and the yield of the three principal producing countries is also shown separately. The African product is mainly from the Transvaal, but includes Rhodesia and lesser fields which altogether had in 1910 a production of \$19,592,679.

#### GOLD PRODUCTION, first period, ten years.

Years.	Africa.	United States.	Australasia.	Others.	Total.
	\$	\$	\$	\$	\$
1890.....	9,887,000	32,845,000	29,808,000	40,609,620	113,149,620
1891.....	15,742,400	33,175,000	31,399,000	50,333,600	130,650,000
1892.....	24,232,000	33,000,000	34,159,300	55,424,100	146,815,100
1893.....	28,943,500	35,955,000	35,688,600	56,907,700	157,494,800
1894.....	40,271,000	39,500,000	41,760,800	59,643,800	181,175,600
1895.....	44,728,400	46,610,000	44,798,300	62,626,900	198,763,600
1896.....	44,581,100	53,088,000	43,776,200	60,806,300	202,251,600
1897.....	58,558,700	57,363,000	52,665,700	67,486,300	236,073,700
1898.....	80,128,500	64,463,000	64,860,800	77,427,400	286,879,700
1899.....	73,023,000	71,053,400	79,321,600	83,326,100	306,724,100
Total . . .	420,095,600	467,524,400	458,238,000	614,591,820	1,959,977,820

#### GOLD PRODUCTION, second period, eleven years.

Years.	Africa.*	United States.	Australasia.	Others.	Total.
	\$	\$	\$	\$	\$
1900.....	8,671,900	79,171,000	73,498,900	94,292,700	255,634,500
1901.....	9,089,500	78,866,700	76,880,200	98,738,300	263,574,700
1902.....	39,023,700	80,000,000	81,788,800	96,135,100	296,797,600
1903.....	67,998,100	73,691,700	89,210,100	96,902,800	327,702,700
1904.....	85,913,900	80,464,700	87,767,300	92,911,400	347,087,300
1905.....	113,254,700	88,180,700	85,926,500	92,926,800	380,288,700
1906.....	135,358,000	94,373,800	82,391,400	90,379,800	402,503,000
1907.....	151,984,100	90,435,700	75,677,700	94,869,100	412,966,600
1908.....	166,520,500	94,560,000	73,327,300	108,069,100	442,476,900
1909.....	170,988,600	99,269,100	71,007,900	112,475,800	454,145,700
1910.....	175,189,900	96,269,100	65,470,600	117,774,300	454,703,900
Total . . . . .	1,123,992,900	955,386,800	862,736,700	1,095,505,200	4,037,621,600

\* The falling off in the production of Africa in the 1899-1903 period was due to the Boer war.

WORLD'S INDUSTRIAL CONSUMPTION as estimated by the Bureau of the Mint.

Calendar Year, First Period.	Value.	Calendar Year, Second Period.	Value.
	\$		\$
1890 .....	50,000,000	1900 .....	76,291,600
1891 .....	50,000,000	1901 .....	79,417,600
1892 .....	50,000,000	1902 .....	75,865,100
1893 .....	50,517,300	1903 .....	74,556,200
1894 .....	52,520,200	1904 .....	77,845,000
1895 .....	59,080,800	1905 .....	82,975,200
1896 .....	59,730,200	1906 .....	93,145,900
1897 .....	59,940,300	1907 .....	97,168,600
1898 .....	65,576,200	1908 .....	88,572,300
1899 .....	73,262,100	1909 .....	100,506,100
		1910 .....	111,848,500
Total .....	570,627,100	Total .....	958,192,100

These estimates are confessedly inconsistent and unsatisfactory in many respects, and have been given as estimates only. It now seems probable that the bureau erred in treating the results of the German inquiry of 1907-8 as showing the consumption of new material. If a deduction of one-third is made from these figures the result is more consistent with the returns from the inquiry of 1896-97, and this has now been done for the years 1909 and 1910, the only ones for which the bureau has used the high figures. The figures for Great Britain and France have also been reduced to make them conform more reasonably with those for Germany, and because there is reason to believe that sufficient allowance has not in the past been made for old material entering into the articles presented at the French stamping office.

#### EXPORTS TO ASIA.

In the estimates for industrial consumption as given above no amounts have been included for Asia for the reason that it is impossible to distinguish the amounts that have been taken by India and most Asiatic countries for currency and hoards from what has been taken for ornaments etc. It is more satisfactory to deal simply with the amounts of gold which these countries have drawn from the world's supply for all purposes.

There are practically no figures for the absorption of western or central Asia. The statistics for China are of little value, but on the whole there is a movement outward, showing that the production, possibly augmented by unrecorded imports, exceeds the recorded imports.

In statistics of the precious metals India is the most important country of Asia, and has long been one of the most important in the world. The Government of India has advised this bureau that the uncoined gold imported into that country might be considered to be used for ornaments and in manufactures. This amounted in 1910 to \$47,026,698.

The movement to India deserves to be treated in a class by itself. A large part of the gold and silver that goes there sinks out of sight, and whether it is made into ornaments or buried in the ground, is withdrawn at least in large part from the monetary stock of the world. Some of it may be brought out in periods of emergency, such as times of famine, and reconverted into money, but in the past a steady stream of the precious metals has moved into India and disappeared as a factor in the commercial world. Sir James Wilson, K.C.S.I., for many years in the Government service in India, in a comprehensive

address delivered before the East India Association of London, on June 14, 1911, reported the net imports of gold by India since 1840 at about 1,200,000,000, or one-tenth of the world's production in that time.

#### THE HISTORICAL PARALLEL.

The most impressive circumstance in favour of the theory that the present movement of prices is mainly due to the increased supply of gold is the fact that just such a movement of prices followed fast upon the discovery of gold in California and Australia. There are many features of similarity between the conditions of that period of expansion and the present one.

The production of gold in the world prior to the discovery in California was about \$35,000,000 a year, and of silver probably about the same. Estimates for that period are vague. The amount of gold actually in sight in banks and treasuries was very small. England was practically the only country in Europe that had a considerable amount in circulation. January 1, 1850, the stock in the Bank of England was about \$85,000,000, and Tooke and Newmarch estimated the amount of gold coin in circulation in the United Kingdom at \$250,000,000. On the continent, silver was the common money of trade. France was estimated to have \$500,000,000 in silver coin and \$15,000,000 in gold. The United States, according to an estimate by the Secretary of the Treasury, had about \$150,000,000 of gold and silver. In any calculation of the relative importance of the new supplies of money, of course the entire stock and production of both gold and silver must be taken into account. Also the use of paper money. The later years of the decade ending with 1849 had been years of industrial depression and social unrest in Europe. Political agitation, extending in several countries to attempts at revolution, prompted in large degree by the desperate condition of the people, was general over Europe. Gold was discovered in California in 1848 and in Australia in 1851, and by 1852 these new fields were producing together over \$100,000,000 per year.

Prof. Stanley Jevons, a contemporary writer of high repute, held more positive views as to the influence of the gold supplies upon prices. Writing in 1865 and reviewing prices since 1849, he said:—

“If we compare prices now (March, 1865) with what they were at their lowest in 1849, we find there has been a rise of 21 per cent. If we take the average of 1845-1850 as our standard of comparison the rise is 11 per cent. The real permanent rise due to the gold discoveries is doubtless something between these, or probably nearer the higher limit, 21 per cent. The gold discoveries have caused this rise of price. They have also neutralized the fall of prices which might have been expected from the continuous progress of invention and production, but of which the amount is necessarily unknown.”

He gave much importance to the large exports of specie to India, and expressed the opinion that European markets alone could not have absorbed the new supplies, without a revolution in prices. He said upon this point:—

“Asia, then, is the great reservoir and sink of the precious metals. It has saved us from a commercial revolution and taken off our hands many millions of bullion which would be worse than useless here, and from the earliest historical ages it has stood in a similar relation to Europe. In the Middle Ages it relieved Europe of the excess of Spanish-American treasure, just as it now relieves it of the excess of Australian treasure. ‘The Indian trade,’ says Macpherson, ‘arose to considerable magnitude at the same time the American mines began to pour their treasures into Europe, which has happily been pre-

served by the exportation of silver to India from being overwhelmed by the inundation of the precious metals, as it must have been had no such exportation taken place.”

Dr. James Bonar, Deputy Master of the Canadian Mint, speaking before the Canadian Club, Ottawa, January 11, 1913, expressed these views:—

But, now, the extent of the depreciation caused by the great production of gold *is not known*. We had with us a most charming man the last time, I think, we met in this room—Professor Irving Fisher of Yale, and he discoursed to us on this question, “The Rising Cost of Living,” especially that aspect of it which I have just touched on,—the rise in prices, which is not the same thing, but is a part of it. According to some people it is nearly the whole. He spoke to us of the difficulty of getting accurate enough statistics on the subject. He told us of a conference that was going to be held—an international conference of economists, to determine the causes of the increased cost of living, and amongst other things, to persuade the statisticians of various countries to adopt something like uniformity in their methods. Now at present they are not uniform. The statistics of one country are drawn up on different principles from the statistics of another. You heard from Professor Fisher himself that, if you were to go by the index number to regulate his plan, to work his plan, for keeping up the value of money, you would need to have an index number you could rely on and you would need to get all the various countries of the earth to adopt the same kind. At present they use each a different one. Well, when a very young boy, indeed, I had the notion that all grown up people were infallible, except of course when they were giving me good advice. After that I had the notion—when I had given up the first position—I had the notion that the press and printed book were infallible, but from that position too I was driven. And finally I fell back on the view, and held it a long time, that at least government blue-books were infallible. But I have been thirty years in the “silent service,” that speaks through blue-books. My faith is a little shaken. I won’t say that it is gone. I have a philosophic faith that accurate statistics will be forthcoming and comparable ones will be forthcoming. And one realizes the difficulties in the way; one also recognizes the prodigious efforts, and heroic efforts, made by the most patient, self-denying officials, to procure accuracy in those statistics. But, when all is said, the statistics remain defective, and, as to those of one nation as compared with those of another, well, they are not so useful as they might be; *they are not comparable*.

So that we do not know the magnitude, the dimensions of the phenomenon that we are going to study. We know that the gold is only one cause, that there has always been a race between the expansion of industry and gold discoveries, and that on all previous occasions the expansion of industry has won the race.”

## XXVI.

### CONCLUSION.

The preparation of this report was commenced before the outbreak of the great war in August, 1914, and does not deal with conditions arising since that date.

The increase of the gold supply appears to have reduced the purchasing power of money and to have brought about a corresponding increase of values, measured in money, in all the leading commercial nations since 1897. We have not attempted to estimate the extent of the advance in prices, due to the increase of the gold supply, but are of opinion that the influence of the gold supply has been a real factor in the rise of prices.

The advance of prices in Canada has been stimulated greatly by the enormous expenditure on railways and public works and by large investments in non-productive



lines incident to the development of a young country such as Canada, great in territorial area, rich in resources and occupied by a people most optimistic regarding the development of these great resources.

The advance of prices in Canada has been largely increased through manifold forms of extravagance and wastage, public and private, individual and social.

Among the contributory causes to the advance of the cost of living may be included the loss, through expenditure on a rising scale, for luxuries, and through wasteful methods in the household.

The main factor in restricting supply and enhancing the cost of commodities, is the withdrawal of population from the land, which has decreased the proportion of persons engaged in producing the food supply.

Uneconomic methods of distribution have also contributed materially to the enhanced cost of commodities.

The chief influences on the side of demand are the concentration of population in towns and cities, which has increased the proportion of non-producing food consumers; the general advance of the standard of living and habits of extravagance which have extended and diversified the demands for comforts and luxuries.

In the preceding part of this report reference has been made to various causes contributing to the increase in commodity prices, with suggestions for improvement in existing conditions.

We look for such improvement through land settlement, greater attention to mixed farming, increased production, with standardization and improvement of quality in farm products, together with co-operation in their distribution. A campaign of education in progress to this end has been actively promoted by the Department of Agriculture of Canada, and by the Departments of Agriculture in the several provinces.

That the work done in disseminating information on agricultural topics through these agencies and the teaching of the agricultural schools and colleges will be productive of good results in the future, is our confident hope.

The extension of the parcel post system and the making of good roads would, in our opinion, contribute towards a reduction in the cost of producing the staple commodities of the farm.

There is a growing demand amongst the farmers, more especially west of the Great Lakes, for cheaper and more accessible "working capital" to develop their farms and to enable them to supplement the growing of cereals, by the production of meats and dairy products, which we have found to be among the most important items in increasing the cost of living.

The general demand for an improvement in conditions of living, arising through the spread of education, has been an important contributory cause to the increase in the cost of living. "You cannot educate people and expect them to live under the old conditions."

If the teaching in the public schools of Canada be supplemented by courses in vocational training, we are firmly convinced that such action on a proper scale will tend to promote and maintain industrial efficiency and thus serve the best interests of this country.

The cordial thanks of the Board of Inquiry are due to Mr. Thomas J. Lynton, secretary of the Board, and to the federal and provincial officials and others, who gave valuable assistance to the members of the Board in the course of their inquiries.

The whole respectfully submitted.

JOHN McDOUGALD,  
*Chairman.*

J. U. VINCENT.  
C. C. JAMES.



# REPORT OF BOARD OF INQUIRY INTO COST OF LIVING CANADA—1915

## APPENDIX No. 1.

*Exhibit by Department of Labour, Canada, Statistical Memorandum affecting the Cost of Living in Canada (through Mr. R. H. Coats).*

### INTRODUCTION.

At the outset of any inquiry into a subject so manysided as the present it is essential to define its scope, i.e., to discuss the precise meaning to be attached to the term "cost of living," otherwise its very familiarity may prove a pit-fall, where so much depends upon clearness and accuracy of expression.

### "THE COST OF LIVING."

Broadly, the "cost of living" means the sum of the exertions and sacrifices (the "efforts" and "waitings" of the economist) necessary to maintain life;<sup>1</sup> and a "change in the cost of living" means (in the same broad way) any variation in the degree of effort by which a livelihood is gained. Inasmuch as the common measure of such "exertions and sacrifices" is money, the "cost of living" in the usual acceptance means the amount of money paid out for subsistence, and a "change in the cost of living" means any variation in the volume of such payments.

### FACTORS IN THE COST OF LIVING.

Thus the first obvious factor in cost of living is price—the rate at which subsistence may be purchased. But clearly price is not the only factor. If the amount of money coming into the possession of the individual is adjusted simultaneously with any change through price in the amount going out, then there has been no real change in conditions—no change at any rate constituting a problem on the score of alteration in "real" cost of living.<sup>2</sup> The problem arises where correspondence of this kind is lacking—where the one has lagged behind the other or taken a contrary direction.

<sup>1</sup>See Report of the Royal Commission on the Cost of Living in New Zealand, 1912, pp. X-XI.

<sup>2</sup>"The problem of the cost of living in its completeness is a problem of the purchasing power of incomes, and the purchasing power of any income is dependent on two factors, of which the purchasing power of the dollar is only one; the other is the number of dollars in that income." Irving Fisher "*Why is the Dollar shrinking?*" p. I.

Earnings in turn depend on more than one consideration. They depend on rates of remuneration, or wages. But quite as much they depend on the volume of employment, and the extent to which as a consequence the services of the earner are requisitioned.

Still another factor is the "standard of living." If individuals or communities from time to time change their manner of living to a higher or lower plane, this again will enter in the most intimate way into the cost of living.

Thus, from a broad point of view, the "cost of living" involves the whole gamut of relationships between earnings and spendings. The investigation of it must take count not only of the factors just mentioned but of their relations and influences *inter se*; for they are not separate and isolated phenomena, but are bound up inextricably with each other, and constitute little less than the entire economic activity of the community.

#### SIGNIFICANCE OF "HIGH" AND "LOW" PRICES.

This breadth of outlook is especially necessary in approaching the subject of prices, with which cost of living studies begin, and especially "high" and "low" prices. It is apparent that to estimate "real" cost of living in terms of price alone is to proceed upon too narrow premises. Yet no practice is more common. High prices are usually mentioned as synonymous with difficulty in obtaining the means of living, low prices as synonymous with ease in the same process. But, by the verdict of history, the very reverse is oftener the case. High prices usually, though not invariably, prevail when trade is active and opportunities for employment at good wages are numerous; low prices when trade is dull, employment unsteady, and wages low or falling. Low prices, it is true, enable commodities and services to be bought for little; but that little may at such a time be exceedingly difficult to acquire. A prolonged depression in prices more than any other agency may be the parent of business inertia, leading often to widespread social disturbance and even to political revolution.<sup>1</sup>

On the other hand, a rise in general prices, though it makes living dear, has ordinarily the effect of stimulating hopefulness and energy in the business world and thus of making earnings even more than proportionately plentiful. Credit (on which the whole structure of trade is built) expands. It is now the turn of the debtor, a term which includes the employer, (the keystone of the modern industrial arch). The great wage-earning class, though it may find difficulty for a time in obtaining its share, and may express its discontent in strikes involving losses both to itself and to the community, gains in the long run from the increase in production—the only source from which a general gain is possible. Certain others are losers; holders of bonds and long-time securities; savings bank depositors on stable rates of interest; those whose salaries are fixed by law (civil servants, the beneficiaries of pension funds, etc.); those paid by tolls or fees established by custom, (though these will profit by an increase in trade). There is always, of course, the serious danger that the "good times" may discourage economies and improvements in industrial processes, and that under their influence buoyancy may be fanned into non-productive speculation, when the high prices will represent fictitious values and be wholly evil. Moreover, a check to activity when prices are high causes suffering of an especially acute kind, the diminution in purchasing ability coming at a time when the severest demands are

<sup>1</sup>According to Sir Archibald Alison, "the two greatest events which have occurred in the history of mankind" have been directly caused, the one by low and the other by high prices. These events were the fall of the Roman Empire, which, according to Sir Archibald, "was in reality brought about by a decline in the gold and silver mines of Spain and Greece," and the Renaissance which he ascribes to the discovery of the mines of Mexico and Peru. The depressions of the 1840's and the 1890's, with their accompanying unrest, (both periods of extremely low prices) are within easy memory. (Cf. Nicholson, *Money*, p. 61.)



being made upon it. The matter is one on which no final generalization is possible; nor is it to be assumed that the general price level in itself is a barometer of welfare; but it would appear upon the whole to be true that, reckoning the losses with the gains, a rise in prices, provided it be distributed and is neither sudden nor extreme, tends to be beneficial in its influence, and thus to lessen the real problem of winning a livelihood, while a decline tends to the opposite.

The reason for the narrow interpretation attached to the phrase "cost of living" is, of course, on the surface. In times of falling prices, the agencies operating most visibly against the common welfare are "bad times," "depression of trade," etc., frequently ascribed to "over-production." When, however, in times of high prices any failure in earnings occurs, through cessation temporary or final of the prevailing prosperity, the factor that stands out is the large amount of money required to buy subsistence and the point of attack becomes the "high cost of living."<sup>1</sup>

#### THE PRESENT SITUATION.

It is a situation of the latter kind which exists in 1913-1914. Canada and indeed the world, stands at the apex of a rise in prices that has been in progress almost continuously (occasional recessions being followed by recoveries and the attainment of still higher levels) for a decade and a half. At times within that period the rate of increase has been rapid beyond modern precedent. In this country, the final result has been an advance of approximately 50 per cent on the average and of considerably more in the case of several of the most important articles of consumption—an advance that has revolutionized the terms in which the individual reckons his expenditures. On the other hand, it has been a period of marked "prosperity," with all implied in the term in the way of expanding trade, buoyant public revenues, enhanced valuations, and abounding opportunities for profitable investment and employment.

But though the adjustment of wages scales has been continuous, and Canada has been free from labour disturbances of the colossal kind that have appeared in England, the persistent nature of the rise has rendered such adjustments obsolescent almost as soon as made. Especially during the years 1910-11-12 has this been true. Finally, in 1913, after eighteen months of exceptional rapidity in the upward movement, a check to the price rise was administered by the prevailing financial stringency. But, while prices were on the whole but little higher in 1913 than in 1912—with food stuffs and rents in many localities actually somewhat lower—complaints as to the high cost of living were much more prevalent in 1913, largely no doubt through the coincidence

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<sup>1</sup>"The economists," says Taussig, (*Quarterly Journal of Economics*, XXVII 413), "speak of the 'rise in prices;' the general public speaks of the 'high cost of living.' It results from the fact that very different phenomena are had in mind by the two sets of persons. The economist is thinking and reasoning about . . . the general rise of prices. The man on the streets is thinking about the exceptional rise in the prices of one important set of commodities. The general rise is not unwelcome."

The two nevertheless are very apt to be related. Irving Fisher says (*American Economic Review*, Sept. 1912.) "The phrase 'cost of living' . . . is usually taken as referring only to special groups of commodities, mostly foods, and only for the retail prices of these commodities. The general level of prices, on the other hand, means the level of all prices, whether retail, wholesale, jobbing, factory or farm prices, and of all commodities, whether of food, raw material, machinery, land stocks, bonds, or any other goods whatsoever which are bought and sold. Now, the 'cost of living' will go up and down with the general level of prices and at the same time fluctuate from special causes of its own. . . . The statistics of the past indicate that the recent rise in the cost of living has been for the most part due to the general rise in prices of all kinds, and only to a small extent, if at all, to special causes applying to the retail price of foods." Without necessarily accepting the view of the last sentence, the necessity of considering the "cost of living" in its general price-setting is patent.

of unemployment with diminished earning capacity at a time when prices stood at the highest in a generation.<sup>1</sup>

<sup>1</sup>The agitation to which the advance in the cost of living has given rise has taken on various forms. On the Continent of Europe the general unrest has been marked by bread and meat riots in Austria, socialist victories in Germany, and popular demonstrations in France and Italy. In Great Britain, as noted, the strikes of labour have been on a scale unprecedented before. Outside of Europe the wave of discontent has passed from Tokio to Buenos Ayres. The Chinese revolution was said to be largely due to the advance in rice. In the United States a significant development has been the formation of Housekeepers' Leagues in various cities. In Canada, the movement for higher wages has been steadily in progress, being most active in 1903, 1907 and 1912; public meetings have been held in various localities for the discussion of the question; resolutions have been passed by public bodies; investigations held by Boards of Trade, etc. Everywhere has been continuous debate as to the causes of the change and the remedies available. A writer has compiled a list of eighty "causes" adduced in one country or another, "while in every country political parties in opposition has as usual attributed the rise to the actions of the parties in power." (Layton, *Introduction to the Study of Prices*, p. 2.) Governments have shown increased energy in prosecuting enquiries and publishing data, special reports on prices having been issued in the United Kingdom, Australia, New Zealand, Canada, the United States, and most of the countries of Europe. The "High Cost of Living," has been the subject of a special message to Congress by a President of the United States suggesting the calling of an International Conference on the subject. Massachusetts and New Zealand like Canada, have appointed special commissions for the investigation of facts and causes.

## APPENDIX No. 2.

*Exhibit contributed by Department of Labour, Canada, through Mr. R. H. Coats.*

### (COMMODITY PRICES.)

#### INTRODUCTION.

The purpose of the present chapter is to review the rise in commodity prices which has occurred during the past few years, noting the extent in Canada and elsewhere, ascertaining the articles and groups of articles and the kinds of prices (wholesale or retail) which have been chiefly affected, and generally presenting data on significant aspects of the situation.

In the passage of goods from producer to consumer, at least two middlemen as a rule intervene—the wholesaler, who assembles the goods in a large way from the producer, and the retailer, who breaks up these lots to suit the needs of the individual consumer.<sup>2</sup>

Wholesale and retail prices are quite different phenomena from an economic point of view. The prices quoted for large quantities usually dominate wide areas: the price of Canadian Western grain, for instance, is fixed at Fort William for the whole of Canada and is governed by Liverpool; retail prices may change from place to place and even from dealer to dealer. Wholesale prices are much more sensitive, and sometimes fluctuate violently with changes in market sentiment: they are thus valuable as a barometer of industrial and commercial conditions; while retail prices, though they

<sup>2</sup> "The method of course, varies in different branches of trade, there being more middlemen in some and less or none in others, and according to circumstances. The two main kinds of prices, however, are those fixed by the first middleman, or wholesaler, and those fixed by the second middleman or retailer. Producers' and jobbers' prices are here included with wholesalers."

"The retail price of a commodity is influenced by, and is nearly the sum of, the wholesale price, the cost of transporting the goods from the market, warehouse, or ship, merchants' and brokers' commissions, manufacturing, more transport commissions, costs and profits of retailing and delivery, interest on the capital employed in carrying the goods from the time of wholesale purchase to the time of payment by the consumer, and (in some cases) government tax." A. L. Bowley, *The Economic Journal*, XXIII, 514.

follow wholesale in the long run, move slowly, the retailer being a buffer who absorbs the more violent shocks of the market and sometimes prevents the lesser changes from reaching the consumer at all. Again, an investigation into wholesale prices usually covers a comparatively large number of commodities (raw materials as well as finished products) each being quoted at one dominant market; whereas in the case of retail prices, a list of twenty-five or thirty articles can be made to represent three-quarters of the expenditure of the average family, and the quotations must be sought at a number of places in order to reflect local conditions. Retail prices are therefore preferable when the object is to measure the cost of living, inasmuch as they represent the price paid by the consumer to the ultimate middleman. At the same time, the accessibility and reliability of wholesale price statistics renders them the medium usually chosen for this purpose; and it is the case that changes even in raw materials and articles which seldom or never appear in domestic budgets, if sufficiently important and long continued, reappear therein in one form or other—wheat in bread, lumber in rentals, wool in clothing, etc., and are thus of importance from a cost of living standpoint.

A word of explanation is necessary as to the method employed in analyzing and interpreting price statistics. This is the well known method of index numbers. An index number is a device for showing the combined or final effect of several price changes. The nature and extent of a change in the price of a single commodity may be seen at a glance by the inspection of the actual price quotations. Suppose, however, the price of Ontario wheat advances within a given period, say, ten cents a bushel, while the price of New Brunswick spruce lumber declines during the same period, say, three dollars a thousand feet—how may the net result of the two changes be expressed? The answer is, by reducing the actual quotation in each case to the form of a percentage of the price during a common standard period, (i.e., translating the quotations into the terms of a common denominator) in which form they may be combined. This, in effect, is the method of index numbers. An index number of any article or number of articles at any date is the percentage which the price of that article or number of articles at that date is of the price of the same article or articles at some other date or period selected as a standard.<sup>1</sup>

## CHAPTER 1.

### WHOLESALE PRICES, CANADA, 1890-1913..

The statistics on the course of wholesale prices in Canada are those of the Department of Labour. In 1909 a special report on wholesale prices since 1890 was issued, and the statistics have been brought up to date in a series of annual reports.<sup>2</sup>

<sup>1</sup>For example: Mr. Sauerbeck's Index number for English wheat for the year 1855 is 137, and for the year 1885, 60. The base period used by Mr. Sauerbeck is the eleven years 1867-1877. The meaning of these index numbers is, therefore, that in 1855 English wheat was 37 per cent above the average price which prevailed during 1867-1877, and that in 1885 it was 40 per cent below that average price. The actual prices of English wheat per quarter quoted by Mr. Sauerbeck in this connection are:—

	s.	d.
Average, 1867-1877.. . . . .	54	9
" 1855.. . . . .	74	8
" 1885.. . . . .	32	10

Though the term index number is occasionally employed, as above, by Mr. Sauerbeck, to denote the relative price of a single article, it more frequently implies a combination of such percentages, whereby a general judgment may be obtained as to whether on the whole prices have risen or fallen. It was in point of fact, as above stated, because of its potentialities for combination, that the index number as an expression of price was devised.

<sup>2</sup>Whole sale Prices, Canada, 1890-1909, Special Report by R. H. Coats. Published by authority of the Honourable the Minister of Labour.. . . .pp. 509  
 Wholesale Prices, Canada, 1910.. . . .pp. 124  
 " " 1911.. . . .pp. 223  
 " " 1912.. . . .pp. 255  
 " " 1913.. . . .pp. 288



## SCOPE OF INQUIRY.

The general purpose being to present a result as representative as possible of cost of living and of the industrial and commercial life of Canada, as many of the main staple articles of Canadian production and consumption were included as was thought consistent with the avoidance of duplication and the preservation of proportion between the different sections of the field.<sup>1</sup> Manufactured articles as well as raw materials appear, though specialized lines are avoided.<sup>2</sup>

On the whole the list is a comprehensive one, including 272 articles, a much larger number than in the great majority of similar investigations.

For each of the commodities a monthly or weekly<sup>3</sup> quotation has been obtained on the same basis from a reliable source in a primary or representative wholesale market for each year back to 1890. These statistics are too voluminous for reproduction and the reader is referred for them to the several reports already mentioned. It has been thought, however, that a table setting forth the average yearly price of each commodity would be valuable for purposes of reference; a compilation on this basis has accordingly been made and will be found in an addendum to this section. By referring to the table the full list of the commodities which constitute the basis of the following generalizations may be noted.

## GENERAL RESULT.

The final result of the investigation is perhaps most clearly shown by the diagram which forms the frontispiece of the present chapter. The line in the diagram indicates the course which the averaged prices of all commodities (272) followed from 1890 to 1913 inclusive. In conjunction therewith the table of index numbers on the next following page will be useful as showing from year to year the movement of prices both for the entire list and also for the several groups. It should be noted that the level indicated by the number "100" in the diagram and table represents the average price during the decade 1890-1899, the period adopted as the "base period" or standard of measurement and comparison.<sup>4</sup>

It will be seen that in 1890-91, the earliest years covered, the general tendency of prices in Canada was steeply downward. This tendency was uninterrupted until 1896, a time of panic-depression and political unrest in the United States, the effects of which were keenly felt in Canada. With the year 1897, however, a pronounced and even violent reaction set in—the beginning of the movement which, continued since, forms the basis of the present cost of living problem. In five years' time the rise had fully made good the loss of the early nineties, and by 1907, or the conclusion of ten years, the gain amounted to no less than thirty-seven per cent. The advance had

<sup>1</sup>The groups under which the articles are classified follow:—

- I. Grains and fodder.
- II. Animals and meats.
- III. Fish.
- IV. Dairy Produce.
- V. Miscellaneous foods, (fruits and vegetables, tea, coffee, sugar and miscellaneous groceries.)
- VI. Textiles (including woollens, cottons, silks, linens and jutes.)
- VII. Hides, leathers, boots and shoes.
- VIII. Metals and implements.
- IX. Fuel and lighting.
- X. Building material, (lumber, bricks, cement paints, etc.)
- XI. House furnishings.
- XII. Drugs and chemicals.
- XIII. Miscellaneous, (furs, liquors, tobacco and sundries.)

<sup>2</sup>The effect of tendencies incidental to the manufacturing process are present in about 40 per cent of the quotations.

<sup>3</sup>Articles subject to rapid fluctuations (grains, animals, meats, dairy produce, fruits, vegetables, etc.), forty-three in number are quoted weekly.

<sup>4</sup>A period of years is preferable as a "base" to a single year, as tending to eliminate the effect of temporarily abnormal features.

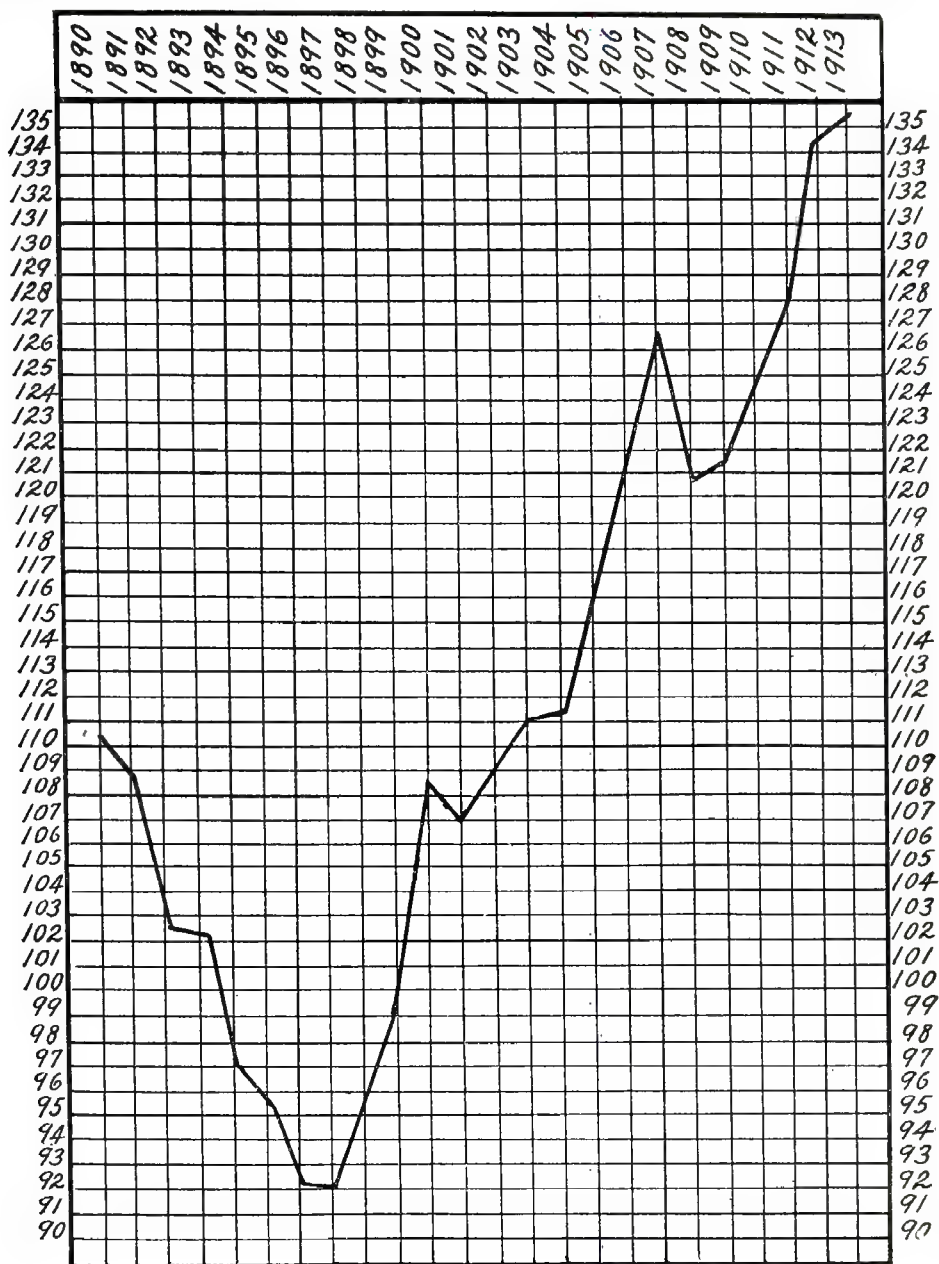
(See Department of Labour Report, Wholesale Prices, 1890-1909, p. 440.)



THE COURSE OF PRICES IN CANADA DURING THE TWENTY-THREE YEARS 1890-1913  
(INCLUSIVE).

Number of Articles, 272.

Average Prices, 1890-1900=100.



not been wholly without interruption: there was a pause in 1899, and another in 1903. A third and more considerable reaction, amounting this time to a recession of several points, occurred after the "crest" of 1907. It lasted, however, little more than a year, and by 1909 the rise was again in full progress. The years 1910, 1911 and 1912 witnessed in fact an even more rapid upward flight of prices than that which characterized the years preceding 1907: by December, 1912, the general level stood at a point approximately forty-eight per cent above that of the low year 1897. A check occurred in 1913, but the general effect was little more than to discontinue the high speed of the advances of 1910-11-12.

TABLE SHOWING INDEX NUMBERS OF ALL COMMODITIES BY GROUPS, 1890-1913.

	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
1. Grains and fodder.....	116.7	123.9	106.7	99.1	94.3	98.8	85.2	80.6	98.8	96.7	99.9	107.3
2. Animals and meats.....	111.2	104.7	108.5	117.7	98.7	92.2	82.4	90.4	97.9	95.1	103.4	111.3
3. Dairy produce.....	103.0	106.2	105.8	110.4	104.6	94.8	90.1	90.1	92.9	101.4	109.0	120.5
4. Fish.....	103.3	97.3	90.6	99.7	96.4	101.4	102.6	98.6	99.6	110.0	106.4	113.2
5. Other foods.....	120.3	121.3	104.7	102.1	95.0	95.2	87.1	86.0	94.3	93.6	96.4	98.6
6. Textiles.....	111.4	104.2	102.2	101.2	97.3	93.6	96.9	98.0	95.2	99.8	100.0	103.6
7. Hides, tallow, leather, boots and shoes.....	100.6	102.6	99.8	101.8	89.9	98.6	92.9	100.1	105.0	109.4	113.8	112.8
8. Metals and implements—												
(a) Metals.....	125.4	114.4	107.6	102.1	91.1	87.0	87.5	85.7	87.6	111.9	121.2	110.4
(b) Implements.....	103.8	103.2	102.9	102.6	102.2	101.0	98.5	93.1	94.3	98.0	100.1	102.2
9. Fuel and lighting.....	107.4	106.7	106.6	102.9	97.5	97.0	98.9	96.4	93.5	96.9	100.8	98.1
10. Building materials—												
(a) Metals.....	103.5	102.7	104.4	103.7	104.6	102.8	97.1	93.9	90.8	95.8	114.0	114.6
(b) Miscellaneous building materials.....	117.6	110.4	106.8	103.7	98.7	95.2	93.9	87.7	87.4	97.2	111.8	106.0
(c) Paints, oils, glass.....	109.5	103.8	98.2	98.6	95.5	96.1	96.2	95.5	100.0	107.6	125.9	121.9
11. House furnishings.....	100.2	100.5	100.9	101.1	101.3	97.9	97.5	99.8	99.6	100.2	110.2	107.9
12. Drugs and chemicals.....	110.5	110.3	104.4	104.4	103.1	100.3	99.8	96.5	96.8	93.3	101.5	99.8
13. Miscellaneous—												
(a) Furs.....	86.5	99.7	103.7	123.6	113.5	80.5	80.7	88.0	111.1	111.8	147.3	140.9
(b) Liquors and tobaccos.....	94.9	99.0	99.7	99.4	98.7	99.4	103.9	103.9	102.3	102.3	103.3	103.3
(c) Sundry.....	112.0	106.7	98.9	100.3	93.7	91.3	92.6	91.2	103.3	109.5	113.0	110.9
Total.....	110.3	108.5	102.8	102.5	97.2	95.6	92.5	92.2	296.1	100.1	108.2	107.0

	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
1. Grains and fodder.....	116.1	106.5	115.5	116.4	118.5	140.2	148.3	149.9	140.7	148.4	167.3	136.8
2. Animals and meats.....	122.2	117.9	111.3	120.7	130.1	133.8	129.6	148.6	163.6	146.6	160.8	180.8
3. Dairy produce.....	106.9	108.9	107.2	115.1	120.2	131.5	136.3	133.6	135.7	136.2	159.0	154.7
4. Fish.....	110.2	116.2	119.5	115.7	121.8	129.5	120.5	134.0	145.1	143.6	155.7	158.0
5. Other foods.....	98.4	98.1	101.8	100.7	103.1	112.5	110.3	107.6	111.3	118.7	126.0	117.4
6. Textiles.....	101.0	105.9	110.4	114.6	123.4	126.1	111.0	108.3	114.6	119.2	120.7	130.8
7. Hides, tallow, leather, boots and shoes.....	118.2	115.7	113.6	119.6	128.1	125.5	120.0	135.4	135.4	139.6	152.4	163.9
8. Metals and implements—												
(a) Metals.....	102.8	105.5	99.7	108.4	128.6	134.8	106.3	101.9	97.6	108.3	117.4	119.1
(b) Implements.....	104.7	105.7	106.2	106.1	106.0	107.1	104.2	102.4	104.5	104.5	104.7	105.6
9. Fuel and lighting.....	104.9	111.0	103.0	104.1	106.4	108.8	102.2	103.8	103.0	100.5	113.3	118.2
10. Building materials—												
(a) Metals.....	122.0	128.8	131.3	134.1	152.7	165.2	162.6	154.6	158.5	165.4	166.5	181.3
(b) Miscellaneous building materials.....	104.6	107.7	107.2	106.8	104.7	108.7	107.5	105.7	109.2	102.6	105.4	112.7
(c) Paints, oils, glass.....	128.1	126.3	122.4	125.3	135.3	141.2	136.8	135.2	145.5	154.5	148.6	144.8
11. House furnishings.....	109.2	109.6	112.7	107.3	113.0	112.7	112.8	110.4	110.6	110.4	114.5	126.2
12. Drugs and chemicals.....	120.2	105.5	109.6	106.4	106.3	108.5	107.1	103.9	109.5	112.1	115.5	113.3
13. Miscellaneous—												
(a) Furs.....	145.2	163.1	171.3	217.4	229.2	239.4	231.8	227.2	234.5	252.9	297.3	307.9
(b) Liquors and tobaccos.....	103.7	107.0	107.8	108.1	106.1	125.5	118.0	117.5	132.9	151.2	155.2	134.7
(c) Sundry.....	116.8	115.9	119.1	121.1	120.9	123.0	117.6	121.6	118.0	100.3	104.3	113.1
Total.....	109.0	110.5	111.4	113.8	120.0	126.2	120.8	121.2	124.2	127.4	134.4	135.5

As illustrated, therefore, by wholesale prices submitted to a careful process of selection and measurement, the rise in cost of living of the past sixteen years may be set down in round figures as 50 per cent.

A statement of this kind requires for the sake of perspective some explanation as to the level from which the rise "took off." As a matter of fact, the year 1897 represents the bottom of a prolonged decline. Beginning with 1873, prices, which were then exceptionally high, fell rapidly until 1882-4, when there was a temporary check and moderate recovery; thereafter they declined with almost equal rapidity until 1890, after which year their course may be seen in the frontispiece diagram. In point of fact, the price level in 1897 was at its lowest, certainly since 1848, and probably in over one hundred years. Thus a fact to be borne in mind in discussing the present rise is that it had its origin in an exceedingly low level and that the period with which the present generation is apt to compare existing conditions was one of abnormally low prices, especially in foods and other lines entering extensively into domestic consumption.<sup>1</sup>

#### WEIGHTED AVERAGES.

The index number of wholesale prices quoted above is obtained by averaging on an equal basis the index numbers for the several commodities. In other words, each article has been regarded as of equal importance from the standpoint of consumption. This, of course, is not true to the fact, though in an inquiry covering so many articles, the disadvantage tends to disappear.<sup>2</sup> By way, however, of adjusting the group index numbers approximately to their importance, a series of "weights," based on a system suggested by the British Association for the Advancement of Science, has been con-

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<sup>1</sup> "In 1896 the United States was swept into a political conflict seldom, if ever, equalled in intensity and bitterness, by what? By nothing else than the low cost of living. The Democratic platform of that year denounced the Republican party and its administration because "the products of the people's toil are depressed in price until they no longer pay the cost of production." Prices were so low that industry languished, wages declined, and unemployment was widespread. The remedy proposed—and it would be laughable if it were not tragic—the remedy proposed was the restoration of high prices by depreciation of the currency." (Ottawa Citizen, January 20, 1914.)

Sir George Paish, who looks forward (Statist, Feb. 14, 1914) to a decline in prices, adds: "I scarcely need to state, however, that there is no prospect of prices falling back to the unprofitable level of the nineties—that condition of affairs was greatly to be regretted from every point of view, arising as it did from a condition of intense discredit. Such an abnormal depression is unlikely to recur for many years."

<sup>2</sup> It is overcome in part by the inclusion of several quotations in the case of the more important commodities, and in part by the fact that several articles are represented indirectly more than once—as for example, wheat in bran, shorts, four lines of flour, bread at two localities, and soda biscuits.

structed.<sup>1</sup> The table of "weighted" and "unweighted" numbers follows, while the chart on the opposite page shows the results since 1900 at a glance:

WEIGHTED AND UNWEIGHTED INDEX NUMBERS, 1890-1912.

Year.	Weighted Number	Un- weighted Number	Year.	Weighted Number	Un- weighted Number
1890.....	112.0	110.3	1902.....	109.6	109.0
1891.....	111.3	108.5	1903.....	109.7	110.5
1892.....	104.9	102.8	1904.....	110.6	111.4
1893.....	103.9	102.5	1905.....	113.8	113.8
1894.....	97.2	97.2	1906.....	120.1	120.0
1895.....	95.6	95.6	1907.....	129.2	126.2
1896.....	90.6	92.5	1908.....	125.1	120.8
1897.....	89.9	92.2	1909.....	126.3	121.2
1898.....	95.5	96.1	1910.....	128.0	124.2
1899.....	99.0	100.1	1911.....	131.1	127.4
1900.....	105.8	108.2	1912.....	143.9	134.4
1901.....	106.0	107.0	1913.....	139.6	135.5

It will be seen that in recent years, and especially in 1912, the weighted number shows a more rapid advance than the unweighted. In 1913, however, it fell considerably. The weighted number is important as it is probably, all things considered, a better index than the unweighted of tendencies in the cost of living, the chief weights being assigned to the groups whose price level directly affects domestic expenditure.<sup>2</sup> Judging by the two lines, the depression in 1907 did not have the lowering effect on cost of living that it had on general business, the fall being 4.1 points in the one and 5.4 in the other. Again during 1912 the steeply upward trend of the weighted line may be regarded as reflecting the serious aspects of the rise from the cost of living viewpoint, while the fall in 1913 would apparently indicate that the reduction in cost of living is a more prominent feature than during the set-back of 1907.

<sup>1</sup>See Report of Committee on index numbers, 1887, 1888, 1889 and 1890.

The "weights" in question follow:—

Group.	Weight.
Grains and fodder.....	18
Animals and meats.....	10
Fish.....	2½
Dairy produce.....	7½
Other foods.....	15
Textiles.....	8
Hides, leather, boots and shoes.....	2
Metals and implements (a) metals.....	8
(b) implements.....	1
Fuel and lighting.....	10
Building materials (a) lumber.....	6
(b) miscellaneous building materials.....	2
(c) paints, etc.....	1
House furnishings.....	2
Drugs and chemicals.....	2
Miscellaneous (a) furs.....	1
(b) liquors and tobacco.....	2
(c) sundry.....	2
Total.....	100

<sup>2</sup>No less than fifty-five of the total of 100 weight units being given to foodstuffs, raw and manufactured, while ten are assigned to fuel, two to house furnishings and eleven to clothing, leaving only twenty-one to metals, lumber, etc.

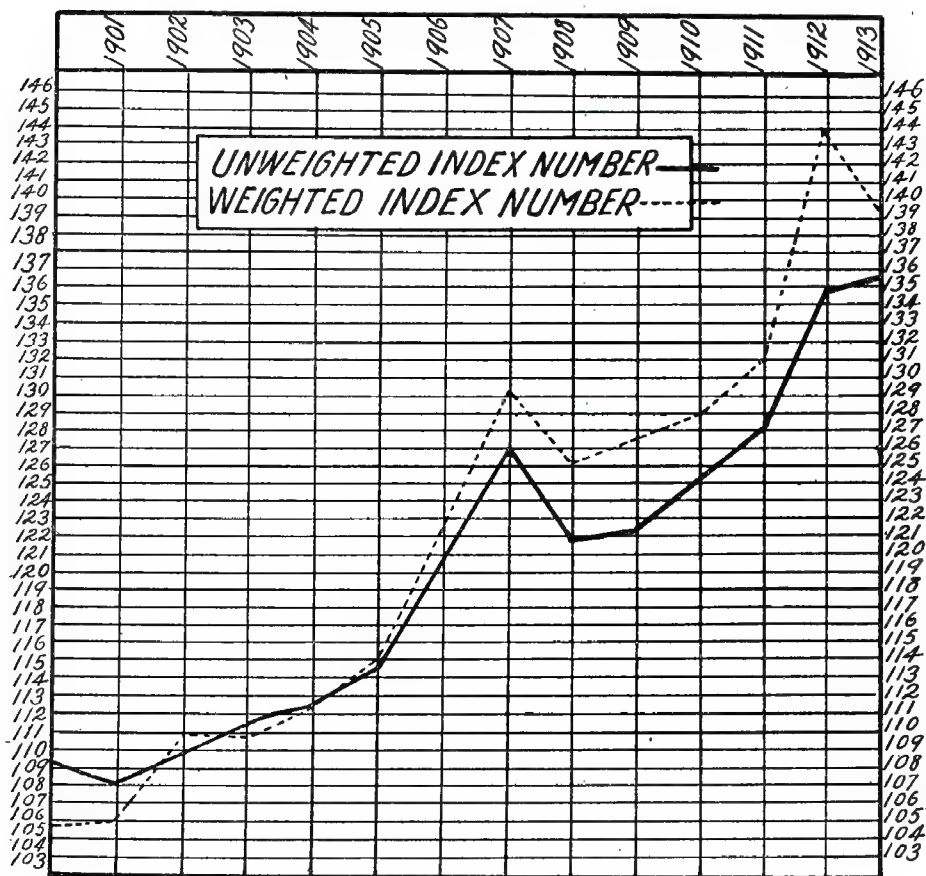


## CHANGES BY GROUPS OF ARTICLES.

Generalizations of the above kind, though informing, require to be interpreted in the light of a more detailed analysis of the tendencies in smaller groups and in individual commodities.

Noting the groups first: The most prominent rise between 1896 and the present from a cost of living standpoint, is that which has taken place in animals and meats,

COURSE OF WHOLESALE PRICES, CANADA, BY WEIGHTED AND UNWEIGHTED INDEX NUMBERS SINCE THE OPENING OF THE PRESENT CENTURY.  
(Prices 1890-1899 = 100).



the advance being no less than 120 per cent. Dairy products have gone up over 70 per cent, and fish over 60 per cent. Cereals are 70 per cent higher, notwithstanding recent declines (in 1912, grains and fodders stood 107 per cent higher than in 1897). The group "miscellaneous foods" (which includes fruits, vegetables, breadstuffs, sugar, tea, coffee, etc., 49 articles in all) stands on the average 36 per cent above the level of 1897, but this represents a recession from 47 per cent in 1912. Furs, it will be noted, show the highest gain of any of the sub-groups, but this is comparatively unimportant, though the rise has been chiefly in low grade poltries. Lumber is another group in which the rise has been very pronounced (over 90 per cent); to the extent to which this is reflected in house rents it is important from a householder's standpoint. The

ise in paints, etc. (about 50 per cent), is also important. House furnishings show a rise of 30 per cent, in part due to the rise in lumber just noted. The group of leathers and of boots and shoes is also very high, showing a gain of between 60 per cent and 70 per cent. The fuel and lighting group has latterly been advancing very rapidly, as a result of the rise in anthracite coal and gasoline, though coal oil has kept low. Metals have fluctuated, but on the whole are not so high as six years ago or as in 1890. Implements and tools have been steady. The series of charts herewith illustrates the main features of these changes.<sup>1</sup>

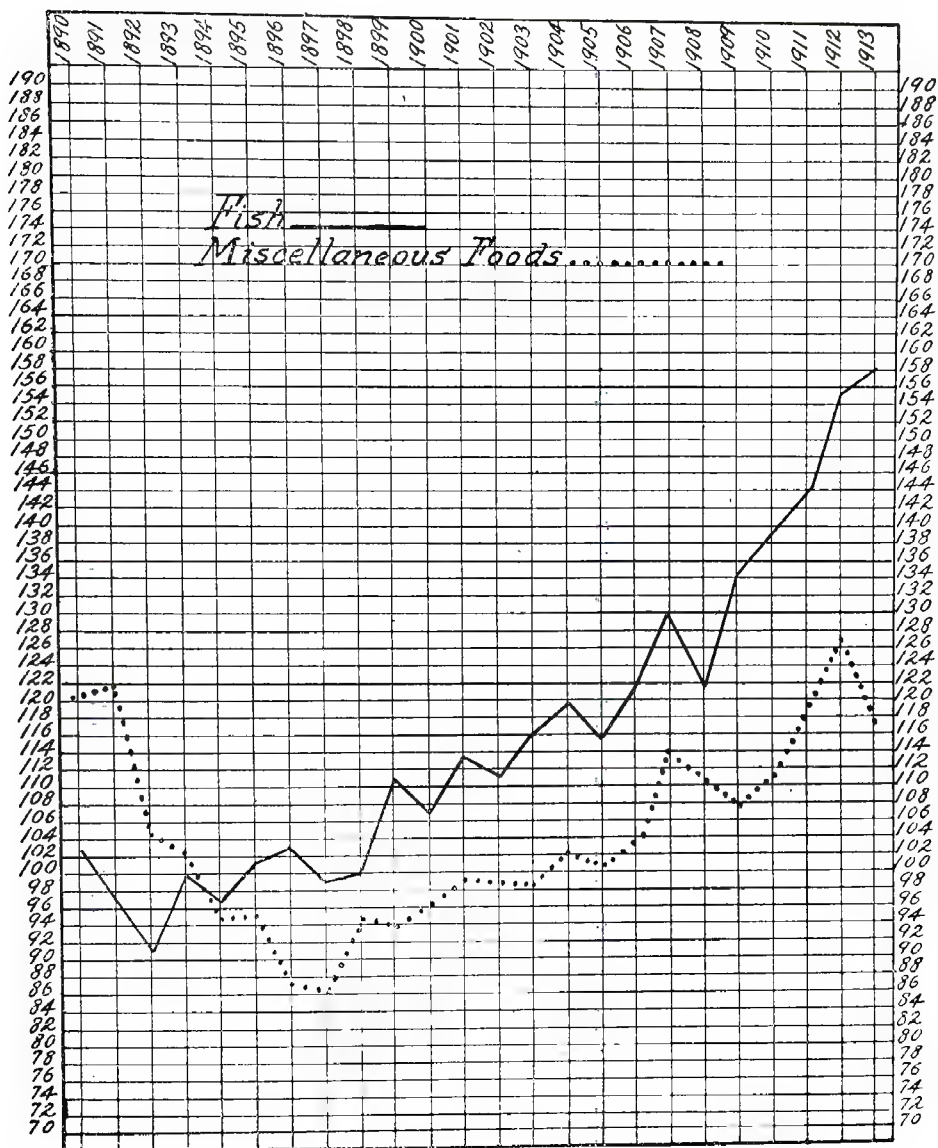
An analysis which shows very well how the general level of prices stood in the various groups in 1913 is contained in the following table in which the 1913 prices are compared with those of (1) the decade 1890-99; (2) the year 1890; (3) the low year in the respective groups, and (4) the preceding year 1912:

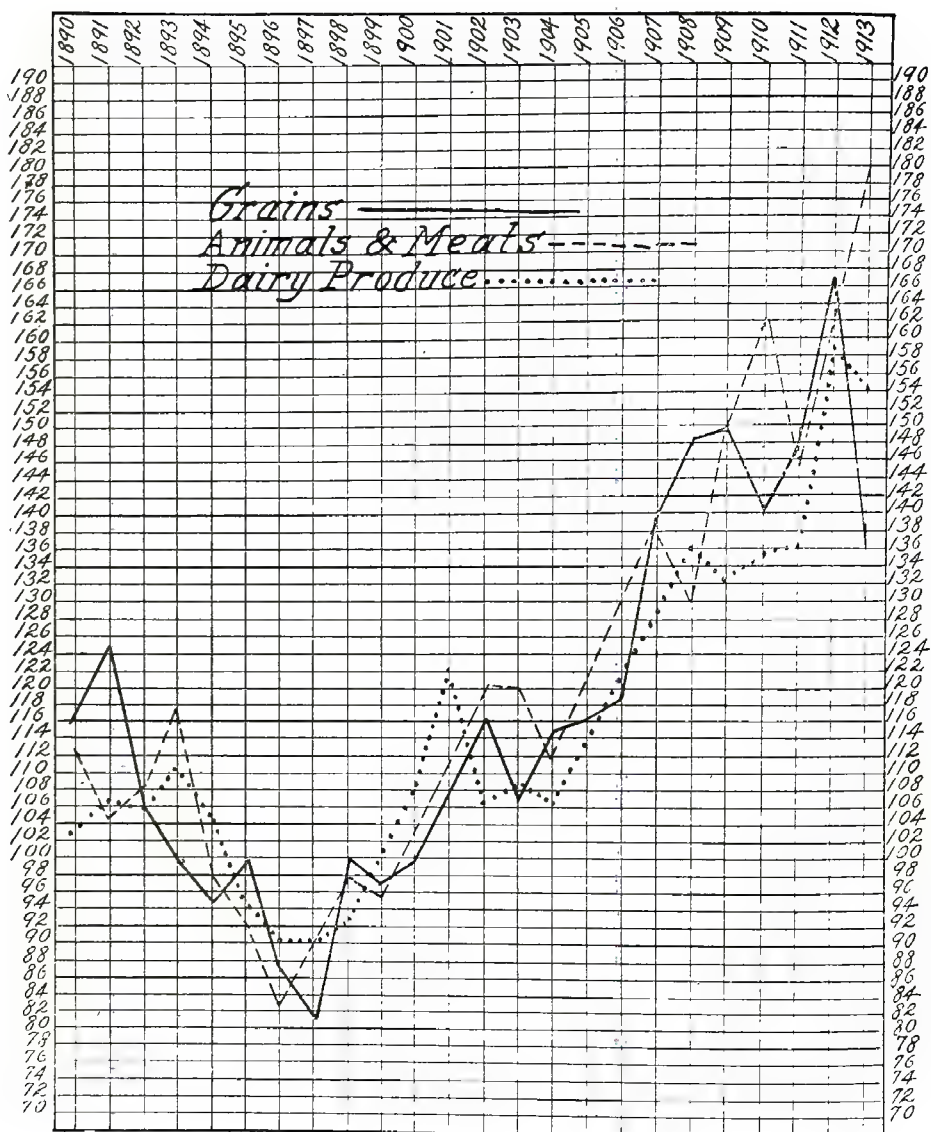
PERCENTAGE OF INCREASE SHOWN BY PRICES IN 1913.

Group	Compared with decade 1890-1899.	Compared with 1890.	Compared with the low year.	Compared with 1912.
I. Grains and Fodder.....	36.8	17.2	69.7-1897	*18.2
II. Animals and Meats.....	80.8	62.5	119.4-1896	12.4
III. Dairy Products.....	54.7	50.2	71.7-1897	*2.7
IV. Fish.....	58.0	53.0	74.4-1892	1.5
V. Other Foods.....	17.8	*2.1	37.0-1897	*6.5
VI. Textiles:—				
(a) Woollens.....	32.5	24.5	55.7-1902	9.5
(b) Cottons.....	45.5	24.1	61.0-1898	8.1
(c) Silk.....	*12.2	*25.9	3.4-1912	3.4
(d) Flax.....	14.7	15.8	46.5-1895	*1.3
(e) Jute.....	119.4	105.2	145.1-1898	28.7
(f) Oilcloths.....	4.7	*14.0	29.1-1899	.4
VII. Hides, tallow, leather, boots and shoes:—				
(a) Hides and tallow.....	82.8	71.8	128.8-1894	3.2
(b) Leather.....	51.8	60.0	63.1-1894	11.2
(c) Boots and shoes.....	63.9	63.4	65.9-1894	16.6
VIII. Metals and Implements:—				
(a) Metals.....	19.1	*5.0	39.0-1897	1.5
(b) Implements.....	5.6	1.7	13.4-1897	.9
IX. Fuel and Lighting.....	18.2	10.1	26.4-1898	4.3
X. Building Materials:—				
(a) Lumber.....	81.3	75.2	99.7-1898	8.9
(b) Miscellaneous Materials.....	12.7	*4.2	29.0-1898	6.9
(c) Paints, Oil and Glass.....	44.8	32.2	51.6-1894	*2.5
XI. House Furnishings.....	26.2	26.0	29.4-1896	10.2
XII. Drugs and Chemicals.....	13.3	2.5	21.4-1899	*1.9
XIII. Miscellaneous:—				
(a) Furs.....	207.9	256.0	282.5-1895	3.6
(b) Liquors and Tobacco.....	34.7	42.0	41.9-1890	*13.2
(c) Sundries.....	13.1	1.0	24.0-1897	8.4
All commodities.....	35.5	22.8	47.0-1897	.8

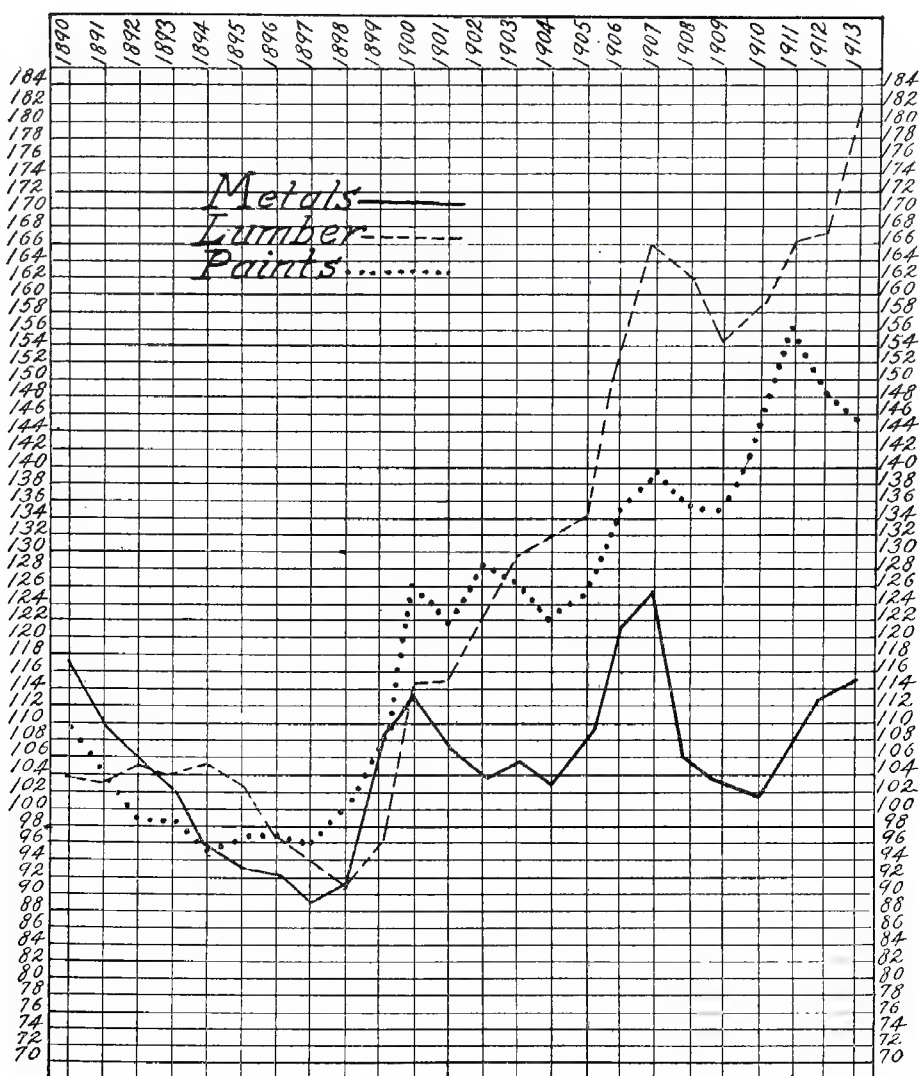
<sup>1</sup>See pp. 93-98 inclusive.

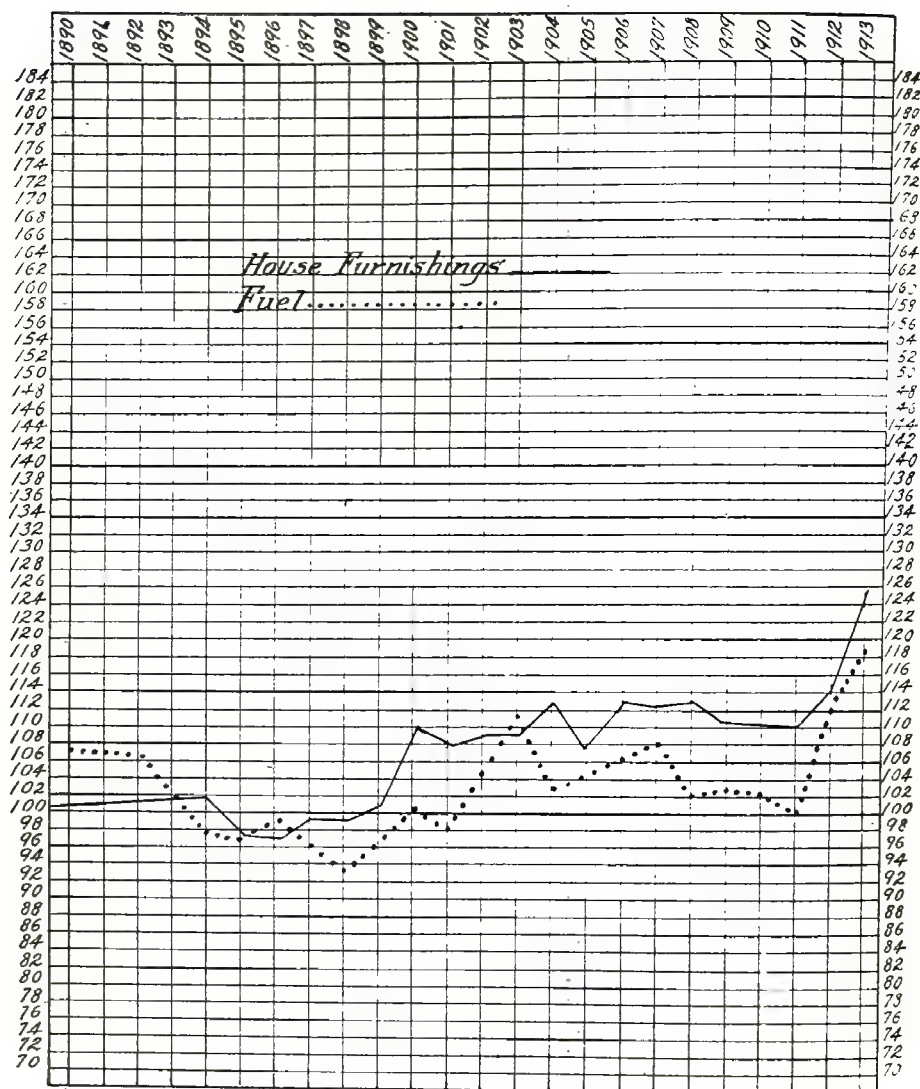
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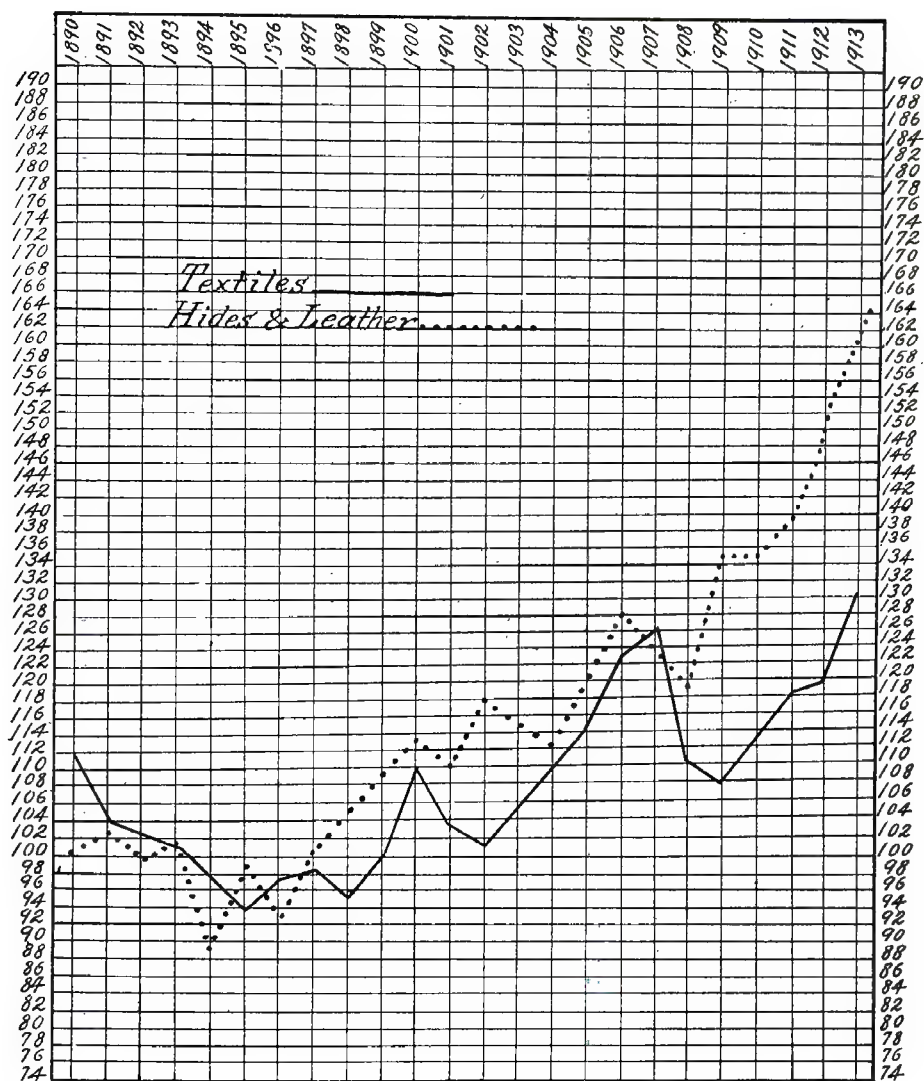


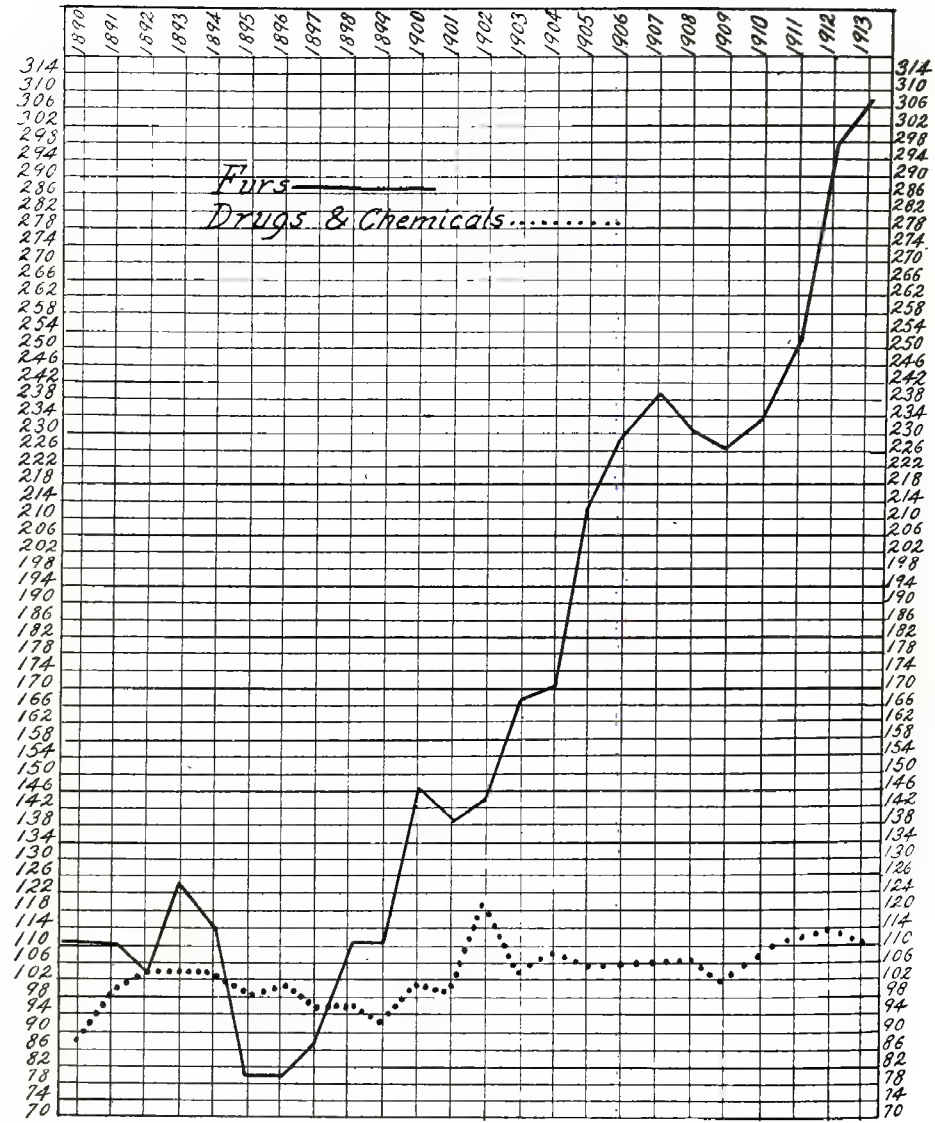














Other arrangements of the data than the above are, of course, possible. For example, all the crude farm products (thirty-nine articles) may be grouped and compared with the manufactured farm products (thirty articles), when it will be seen that the rise in the former between 1897 and 1912 was greater than in the latter (77 per cent compared with 61 per cent), but that last year's decline in fruits and grain has tended to equalize matters, so that manufactured home foods are now 62 per cent higher while crude products are 65 per cent higher. It is interesting also to group the imported foods in the list. Imported foods (seventeen articles) have moved up comparatively little (22 per cent) and that little almost entirely in the last three years. Taking all foodstuffs, crude and finished, in the investigation (100 articles) and comparing them with all materials (172 articles), the rise until last year was much greater in the former (62 per cent compared with 39 per cent); the discrepancy, however, showed a tendency to lessen in 1913 (58 per cent compared with 43 per cent). Again, if the comparison is between raw materials and manufactured articles, the rise has been much greater in the former than in the latter (69 per cent compared with 41 per cent). Other analyses that might be suggested are consumers' and producers' goods, and organic and inorganic goods.

Still another analysis especially interesting from the present point of view is that of all the foods included in the investigation taken in the form in which they enter the household (that is, meats, but not animals; flour, bread and biscuits, but not wheat, etc.) The number of these is eighty-one and their index numbers of the last three years are as follows, the accompanying chart being for assistance in the interpretation; the figures at the side showing the percentage level compared with the decade 1890-99.

The index numbers on which the above statements are based follow:

#### CRUDE FARM PRODUCTS—39 ARTICLES.

	1897	1909	1910	1911	1912	1913
Apples.....	79.2	150.5	134.1	197.0	150.3	129.7
Barley, Ontario.....	62.2	145.1	131.7	170.6	194.5	135.3
Barley, western.....	86.9	160.9	144.9	194.6	179.6	140.6
Beans.....	62.1	177.9	171.4	170.1	231.1	200.7
Cattle, Ontario.....	88.7	152.2	160.9	154.4	176.7	182.8
Cattle, western.....	94.0	112.4	134.8	138.6	159.0	184.1
Cherries.....	98.1	111.7	128.5	128.4	110.6	94.5
Corn, No. 3.....	57.0	164.6	148.3	141.4	172.2	151.7
Eggs, (Toronto).....	77.6	171.5	168.1	157.1	191.0	176.6
Flaxseed.....	85.0	194.4	191.4	208.1	160.0	108.0
Fowls.....	82.3	188.3	170.0	162.3	133.1	163.5
Grapes.....	117.1	104.9	102.1	72.5	76.6	107.9
Hay.....	112.3	135.0	141.3	135.1	178.9	145.6
Hides (3 lines).....	112.0	166.1	160.7	172.9	197.0	203.4
Hogs.....	105.2	147.5	176.9	138.0	160.4	187.8
Honey.....	82.7	147.4	129.3	131.9	141.8	134.4
Milk (Montreal).....	100.0	127.8	127.9	127.9	134.5	143.0
Milk (Toronto).....	106.2	125.6	139.1	138.8	151.8	149.2
Milk (Victoria).....	100.0	113.7	113.7	136.4	159.1	159.1
Oats, Ontario.....	69.2	150.7	119.0	129.1	154.2	123.7
Oats, western.....	89.6	133.3	115.2	120.6	134.8	111.7
Onions.....	128.7	117.4	109.4	174.9	219.2	147.7
Peaches.....	63.6	105.7	69.0	101.6	88.8	69.3
Pears.....	56.5	102.1	111.9	79.2	93.0	78.5
Pears, Ontario.....	75.0	158.4	142.8	155.4	202.4	181.2
Plums.....	62.2	89.4	130.7	68.1	75.3	55.8
Potatoes (Toronto).....	66.0	142.8	103.3	220.4	257.0	154.6
Raspberries.....	60.3	116.7	119.4	156.5	170.4	169.1
Rye.....	71.3	140.4	131.4	144.6	168.3	123.9
Sheep.....	79.4	100.0	118.2	103.6	121.0	137.6
Straw.....	90.9	133.8	125.3	112.7	173.9	149.2

## CRUDE FARM PRODUCTS—39 ARTICLES—Continued.

	1897	1909	1910	1911	1912	1913
Strawberries.....	80.4	86.4	93.3	135.7	119.8	146.9
Tomatoes.....	86.5	98.3	114.4	106.5	103.0	179.6
Turkeys.....	89.3	185.8	169.8	185.8	191.9	211.2
Turnips.....	69.2	93.7	110.6	113.2	142.0	106.2
Wheat, Ontario.....	101.3	143.0	129.7	111.5	126.1	120.9
Wheat, western.....	101.8	149.5	129.5	123.7	126.1	114.1
Wool, unwashed.....	105.6	107.5	119.0	124.5	121.5	141.4
Wool, washed.....	110.9	106.6	113.5	106.9	105.7	120.8
All.....	186.3	134.7	132.1	139.4	152.7	142.3

## MANUFACTURED FARM PRODUCTS—30 ARTICLES.

	1897	1909	1910	1911	1912	1913
Apples, evaporated.....	64.7	93.6	97.1	158.8	118.1	89.5
Bacon.....	101.7	146.0	179.7	149.7	158.4	183.7
Beef, dressed, hind quarters.....	102.5	168.2	205.1	198.8	231.8	230.0
Beef, dressed forequarters.....	84.0	131.7	172.1	159.1	182.2	190.0
Beef, dressed plate.....		139.5	159.5	146.1	150.3	184.5
Bran.....	64.9	182.2	170.9	183.8	196.9	165.2
Cheese.....	98.1	124.4	131.1	129.6	143.4	131.8
Flax Fibre.....	94.4	117.2	122.4	133.6	141.1	130.7
Flour, straight rollers.....	106.5	136.7	129.7	116.6	121.0	118.5
Flour, strong bakers.....	106.8	123.2	117.5	107.1	114.0	108.1
Flour, winter wheat patents.....	103.6	124.5	118.0	105.3	111.7	111.8
Flour, Man., first patents.....	107.9	129.3	124.0	113.9	120.0	115.2
Glucose.....	55.0	145.3	138.1	124.5	142.6	140.3
Hams.....	100.7	131.1	162.2	140.9	144.7	171.1
Hogs, dressed.....	98.4	166.8	186.0	153.3	175.2	207.3
Lamb, dressed.....	88.4	147.7	161.2	137.7	163.7	190.0
Lard.....	78.2	161.3	178.1	131.1	156.1	163.4
Leather (4 lines).....	98.9	119.5	122.9	123.2	136.5	151.8
Linseed Oil (raw and boiled).....	77.1	109.8	147.2	182.4	151.9	103.4
Malt.....	101.5	123.4	123.4	136.1	162.3	125.8
Maple Sugar.....	85.2	197.0	125.9	129.4	124.5	149.0
Mutton.....	66.1	121.7	112.3	194.6	114.7	128.5
Oatmeal.....	80.7	143.3	123.7	129.9	135.6	123.9
Pork, Salt.....	84.5	157.1	180.0	143.5	156.4	182.3
Shorts.....	66.0	162.2	151.7	161.9	177.1	148.1
Tallow.....	70.7	112.9	113.8	114.7	117.8	121.3
Tow.....	131.3	60.6	61.4	59.4	89.6	89.1
Veal.....	102.6	142.6	154.1	150.0	155.4	176.0
Vegetables canned (3 varieties).....	77.5	97.0	90.9	140.4	135.8	113.2
Yarn.....	109.1	104.7	118.9	119.1	119.8	126.8
All.....	89.9	130.9	138.9	136.1	144.8	145.7

\*Including those which have passed through the first manufacturing process only.

## IMPORTED FOODS\*—17 ARTICLES.

	1897	1909	1910	1911	1912	1913
Bananas.....	96.1	115.2	110.6	92.4	199.4	108.2
Chocolate.....	97.6	110.0	106.5	106.5	106.5	106.5
Coffee, Rio.....	74.5	51.8	74.0	109.3	130.6	113.1
Coffee, Santos.....	89.0	62.8	73.1	100.4	112.7	107.7
Cream of Tartar.....	89.9	84.7	91.3	101.1	94.0	107.9
Currants.....	97.3	137.2	132.5	137.3	136.6	127.9
Lemons.....	85.7	74.6	87.8	92.5	92.0	103.5
Molasses.....	72.5	78.6	69.9	72.8	69.9	67.9
Oranges.....	95.9	92.0	96.4	81.5	79.1	105.2
Pepper.....	83.3	101.6	115.6	118.9	144.7	142.4
Prunes.....	106.6	110.0	93.5	156.2	125.9	126.2
Raisins.....	91.1	78.8	66.7	110.1	121.3	108.0
Rice.....	102.4	112.3	117.5	119.3	115.9	121.8
Sugar, Granulated.....	88.2	95.0	102.5	103.1	107.2	92.6
Sugar, Yellow.....	91.0	107.8	111.7	112.5	117.4	99.8
Tapioca.....	79.4	93.2	110.9	135.1	138.5	114.6
Tea.....	98.4	132.6	131.0	129.5	130.2	127.9
All.....	90.5	96.4	98.3	110.5	113.2	110.7

\*Including foods manufactured from imported raw materials.

## ALL FOODSTUFFS—100 ARTICLES.

Grains and fodder.....	80.6	149.9	140.7	148.4	167.3	136.8
Animals and meats.....	90.4	148.6	163.6	146.6	160.8	180.8
Dairy produce.....	90.1	133.6	135.7	136.2	159.0	154.7
Fish.....	98.6	134.0	114.1	143.6	155.7	158.0
Other foods.....	86.0	107.6	111.3	116.0	126.0	117.8
All.....	87.6	126.7	129.8	133.1	142.1	138.5

## ALL MATERIALS—172 ARTICLES.

Textiles.....	98.0	108.3	114.7	119.2	120.7	130.8
Hides and leather, etc.....	100.1	135.4	136.2	139.6	152.4	163.9
Metals and implements.....	89.0	102.5	99.7	107.2	113.7	112.4
Fuel and lighting.....	86.4	103.8	103.0	100.5	113.3	118.2
Lumber.....	93.9	154.6	158.5	165.4	166.5	181.3
Other building materials.....	87.7	105.7	109.2	102.6	105.4	112.7
Paints and oils.....	95.5	135.2	145.5	154.5	148.6	144.8
House furnishings.....	99.8	110.4	110.6	110.6	114.5	126.2
Drugs and chemicals.....	96.5	96.8	109.5	112.1	115.5	113.3
Furs.....	88.0	227.6	234.5	252.9	293.7	307.9
Miscellaneous.....	91.2	121.6	118.0	100.3	104.3	113.1
All.....	92.9	117.8	120.9	123.7	129.2	133.3

## PRODUCTS OF THE MINE—12 ARTICLES.

Antimony.....	71.7	68.9	63.3	64.9	69.0	85.5
Copper.....		105.8	102.6	98.7	130.8	124.0
Lead.....	96.5	99.1	103.4	115.2	139.2	144.6
Nickel.....	73.4	95.4	97.5	89.7	88.3	90.1
Quicksilver.....	94.1	112.2	115.1	112.2	103.2	96.5
Silver.....	81.1	69.6	71.0	71.2	81.2	79.8
Spelter.....	89.3	105.8	110.3	117.4	135.3	131.3
Tin.....	74.8	149.7	167.6	210.3	229.7	227.5
Coal, N.S.....	98.3	124.7	122.5	122.3	122.3	122.2
Coal, B.C.....		113.3	122.5	131.9	147.0	147.0
Coal, Penna., anthracite.....	99.1	113.9	115.9	119.3	129.3	137.0
Iron, pig No. 1, N.S.....		114.3	118.1	123.1	120.1	130.8
All.....	86.5	106.1	109.2	114.7	124.8	126.1

## RAW MATERIALS AND MANUFACTURED ARTICLES.

		Number of Com- modities.	1890.	1897.	1907.	1911.	1912.	1913.
Foods.....	{ Raw.....	47	112.9	85.4	129.1	141.8	154.5	141.9
	{ Manufactured	51	104.2	93.7	118.5	129.3	135.9	134.7
Clothing.....	{ Raw.....	10†	113.4	102.1	134.7	144.5	149.3	202.6
	{ Manufactured.	17	101.2	98.9	121.4	124.1	127.0	130.4
Metals and Metal Products	{ Raw.....	12	129.9	85.5	141.4	109.4	115.3	117.1
	{ Manufactured	34	121.2	91.9	115.6	102.4	103.4	107.5
Lumber and Wood Pro- ducts.....	{ Raw.....	11	99.2	98.4	165.2	158.8	158.7	174.6
	{ Manufactured.	16	101.9	97.1	140.9	131.2	142.6	149.8
Fuel and Lighting.....	{ Raw.....	3	100.1	98.7	115.6	124.5	132.9	135.4
	{ Manufactured.	7	110.0	77.7	101.7	83.1	99.1	108.3
All.....	{ Raw.....	89	111.7	89.7	140.7	146.8	154.9	152.0
	{ Manufactured.	165	110.1	91.0	118.6	118.4	124.9	128.8

†Exclusive of furs (4 lines).

## INDEX NUMBERS OF FOODS, 1911, 1912, 1913.

Meats, Fish, Dairy, Fruits, Vegetables, Breadstuffs, Sugar, Tea, Coffee, Condiments  
etc. (86 in number).

(Average Prices 1890-1899=100.)

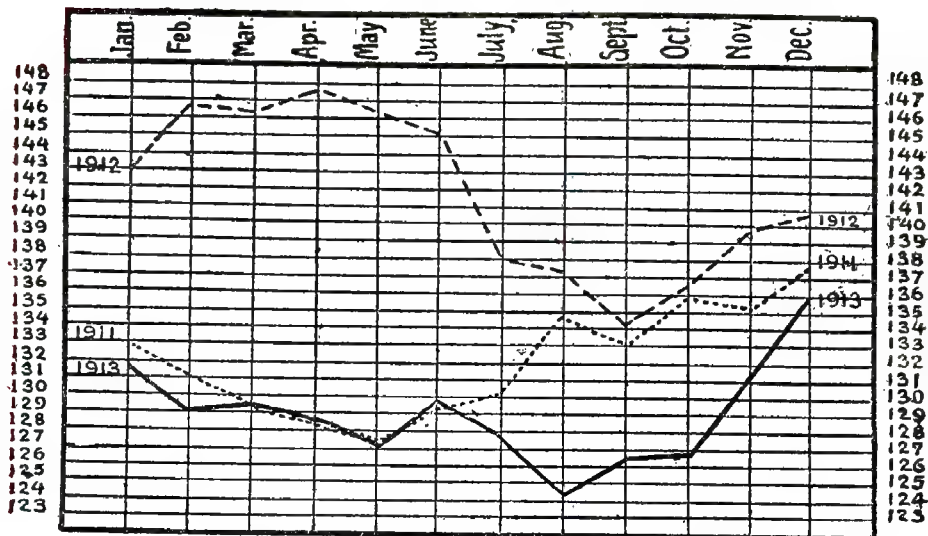
	1913.	1912.	1911.
January.....	131.8	143.0	132.9
February.....	129.1	146.7	131.2
March.....	129.3	146.3	129.2
April.....	129.5	147.4	128.2
May.....	128.5	146.5	127.6
June.....	130.9	145.3	129.3
July.....	128.7	138.1	130.1
August.....	124.6	137.3	134.8
September.....	126.5	134.5	134.1
October.....	126.9	136.6	135.9
November.....	131.7	139.9	135.2
December.....	135.9	140.7	137.7
Year.....	130.1	141.7	132.2



RELATIVE PRICES OF FOODS,<sup>1</sup> 1911, 1912, AND 1913.

Including Meats, Fish, Dairy Products, Fruits, Vegetables, Breadstuffs, Sugar, Tea, Coffee, Condiments, etc.

(Average Prices 1890-1899=100.)



## CHANGES IN IMPORTANT STAPLE COMMODITIES.

For the examination of the price tendencies of individual commodities reference must be made to the large table. It may be convenient, however, to append a few notes of the briefest character with regard to certain important staples:—

**WHEAT.**—The low years were 1894-1896 (61-65 cents). Between that and 1909, the high year, there was a rise of 45 cents a bushel. The present level is 18-20 cents below the high mark.

**OATS.**—Prices rose from 20 cents in 1896 to 40-45 cents in 1909, falling to 33-37 cents in 1913. The 1912 world crop was the heaviest on record.

**BARLEY.**—The rise in western barley was from 21 cents in 1896 to 62 cents in 1911, and in eastern barley from 28 cents in 1897 to 79 cents in 1912. The 1911 eastern crop was very short.

**HAY.**—Baled hay, which sold for \$8 in Montreal in 1894, brought \$17.25 in 1912 and \$14 in 1913.

**BRAN AND SHORTS.**—These commodities have considerably more than doubled since 1897. In 1912 prices were at least 160 per cent higher than in 1897. The demand for feed for the increased dairy herds is the cause attributed. Bran and shorts being by-products, the price is governed largely by demand, supply being determined by other factors.

**CATTLE AND BEEF.**—Western beef have risen from \$2.77 (1894) to \$6.77 (1913), the early quotation being for ranchers; while Eastern cattle have risen from

<sup>1</sup>This includes all finished food products covered in the investigation, eighty-one in number, but is exclusive of raw farm products, such as grain, fodder and animals and of liquors and tobacco.

\$3.02 (1896) to \$6.99 (1913). Beef has followed, the rise in fore-quarters having been considerably more pronounced than in hinds, being from \$4.06 (1895) to \$11.75 (1913), or by two and one-half times.

**HOGS AND HOG PRODUCTS.**—A price of \$9.08 in 1913 compares with one of \$3.86 in 1896 for live hogs. Dressed hogs and various hog products show increases from 100 per cent up in the past fifteen years.

**POULTRY.**—The rise since 1897 has been about 150 per cent. Fowls have doubled in price, and chickens and turkeys more than doubled.

**BUTTER.**—Butter which sold at 18-22 cents in the early 90's, now brings from 25-29 cents wholesale. Summer prices are double what they used to be, but butter always inclined to be dearer in winter, and the rise on a cold-weather basis is not so pronounced.

**CHEESE.**—The rise since 1896 is between 50-60 per cent.

**EGGS.**—The rise is approximately 150 per cent in fifteen years.

**FISH.**—Dry codfish has risen about 50 per cent since 1895-1900. Halibut is up from 7 cents to 10 cents. Salmon trout and whitefish have risen from 6½ cents to 12 cents in the past fifteen years.

**CANNED SALMON.**—The price varies with the pack, but it was \$8.25 in 1913 as compared with \$3.75 in 1897. The world's demand has greatly increased.

**APPLES.**—Prices since 1909 have been at least 40-50 per cent higher than obtained in the 90's. Evaporated apples were very high in 1911 (13 cents), but are back to the price common several years ago (7-8 cents). Other fresh fruits are as a rule cheaper than they used to be.

**POTATOES.**—From year to year potatoes now run considerably higher, the years 1911 and 1912 witnessing unprecedentedly high prices. The demand is larger and steadier than before 1900.

**FLOUR.**—Flour on the whole has been steady since 1909, being considerably higher than in the 90's.

**OATMEAL.**—Oatmeal during the past five years has been on considerably higher levels than in 1896. Prices were as low as \$3 a barrel in 1896, but this was exceptional. It is now approximately \$5 a barrel, or about 30 per cent above the level of 1890-99.

**TEA AND COFFEE.**—There has been a slow but steady rise in tea, the cumulative effect of which amounts to about 30 per cent. Coffee went down rapidly from 1895 to 1902, and stayed low until 1909 on account of heavy production in Brazil. It has since recovered to its former level, but was weak last year on the abandonment of the valorization scheme by the Brazilian Government.

**SUGAR.**—Crop conditions govern prices from year to year. 1911 and 1912 were the highest years since 1893, but a present price of \$4.59 per hundredweight compares with one of 7.10 in 1890.

**WOOL.**—A slump in wool occurred in 1901, but prices firmed in 1905. They were low again in 1908, but are now high. The foreign wool market governs.

**COTTON.**—Since 1904, there have been several years of short supplies and high prices. Prices are now approximately 50 per cent higher than in 1890-99.

**SILK.**—Prices have fallen recently and are still low, being fully 10 per cent lower all round than they were in the 90's.

**LEATHER.**—Prices are approximately 40 per cent higher than in the 90's.

**IRON AND STEEL.**—Prices went down during the 90's, but have recovered, though not to as high a level. They are still a little under those of 1900.

**COPPER.**—Prices were very high about 1907 and have been low since until last year when they rose to a point about 25 per cent higher than the level of 1890-99.

**LEAD.**—1907 and 1912 were high years, but 1910 and 1911 saw prices about the same as in the 90's.

**COAL.**—Bituminous coal has been fairly steady but anthracite coal has gone up materially in the past five years.

**COAL OIL.**—Prices have gone down from 20 cents a gallon, which was common in the 90's, to 12 cents in 1911 and 15 cents in 1913. This, it is said, has been rendered possible by the enormous demand for gasoline previously a by-product in the manufacture of coal oil. Gasoline has advanced from 17 cents in 1900 to 25 cents in 1913.

**BRICKS, LIME AND CEMENT.**—Bricks have gone up by 60 per cent since 1890-99. Lime has advanced by nearly 40 per cent. Cement prices, however, were all but cut in half between 1896 and 1912. They are now slowly advancing.

**LINSEED OIL.**—Prices fluctuate with the flax crop, being very high in 1911 and 1912 (50 per cent over 1890-99) but much easier in 1913.

**ROSIN.**—Prices have been multiplied by four in the last twenty years.

**METHYLATED SPIRITS.**—The price has been reduced by the Government to approximately 60 per cent of what it used to be.

**SULPHURIC ACID.**—This important chemical has doubled in price since 1902.

**TOBACCO.**—The Canadian raw leaf has doubled in price. A standard plug has advanced by 35 per cent since the early 90's.

**NEWSPRINT PAPER.**—Prices have gone down from an average of \$3 per hundred-weight in 1890-99 to \$2 during the last three years.

**BINDER TWINE.**—This important article is lower than it used to be notwithstanding a rapid advance last year.

**RUBBER.**—Prices were very high in 1910-11, but fell to less than half in 1913. They are now about on the average that prevailed during the 90's.

**SOAP.**—Soap has been going up steadily, with increasing cost of manufacture.

**STARCH.**—Starch follows corn and was very high (6 cents) in 1908. It is now 5.6 cents. In 1892 it fell below 4 cents.

## WHOLESALE PRICES, CANADA, 1890-1901.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada.

	Unit	Market	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
<b>I. Grains and Fodder.</b>														
(a) Grains:—														
Wheat Manitoba Northern No. 1	Bush.	Winnipeg.....	8456	9308	8012	7333	6125	7181	6552	7866	9316	7089	7456	7518
" Ontario No. 2.....	"	Toronto.....	9266	9789	7845	6110	5760	7013	7304	7658	8002	6807	7651	6616
Barley Canada Western No. 3....	"	Winnipeg.....	9266	3300	3016	2950	2700	2600	2183	2800	3968	3258	3591	3950
" Ontario No. 2.....	"	Toronto.....	4996	4950	3846	3846	4002	4424	3523	2823	3785	3060	4072	4430
Oats Canada Western No. 2.....	"	Winnipeg.....	4233	3458	2225	2775	3025	2716	2033	2708	3833	3216	3433	4033
" Ontario White No. 2.....	"	Toronto.....	3791	4245	2943	3088	3139	3043	2064	2079	2754	2885	2666	3311
Corn American Yellow No. 3.....	"	Winnipeg.....	4679	7031	4791	5262	4700	4177	2995	2520	3850	4231	4604	4956
Flax Seed N. W. Manitoba No. 1.	"	Toronto.....	5825	6791	5929	5804	5376	5479	4595	4154	5441	6285	5906	6788
Peas Ontario No. 2.....	"	"	4795	7491	6704	4854	4416	4787	4116	3641	4931	5316	4975	4938
(b) Fodder:—														
Hay No. 1.....	Ton.	Montreal.....	91400	91200	110200	101000	79100	95400	122400	108400	89300	76400	95400	107300
" Timothy, Baled No. 1.....	"	Toronto.....	99430	102710	110730	96370	90210	105910	125230	98410	79900	79380	91150	95100
Straw Baled.....	"	"	85840	62290	66350	57080	56450	56830	73430	52360	45200	47180	49060	53430
Bran Ontario.....	"	"	133700	151700	130800	129500	133600	135600	95500	78500	97800	121600	131200	129300
Shorts Ontario.....	"	"	162900	185000	174300	159100	155200	158500	107500	97500	129300	148500	150400	147700
<b>II. Animals and Meats.</b>														
(a) Cattle and Cattle Products:—														
Cattle, Western, Butchers.....	Cwt.	Winnipeg.....	37500	36250	53540	38950	26870	31870	31660	34580	37700	38950	35200	38540
" Butchers (Choice Steers.....	"	Toronto.....	41830	39630	38740	44530	39650	37110	30900	33930	38040	38780	42290	43620
Beef dressed Hindquarters.....	"	"	80420	77920	77500	78330	72220	75000	67000	67000	69500	75000	78750	79220
" Forequarters.....	"	"	54800	51200	52400	53100	48400	40600	32400	39500	46300	51200	49420	49790
Beef Plate.....	"	Montreal.....	78960	78540	79580	84320	74090	63540	54060	67500	72500	72790	81040	72730
Veal.....	"	Toronto.....	46290	48240	49850	62120	46040	42790	38980	50460	48740	46250	57620	60890
(b) Hogs and hog products:														
Hogs dressed.....	Cwt.	Toronto.....	61000	59650	62050	77560	61290	53880	49440	62170	59500	56420	70690	85100
Bacon, breakfast Eng. boneless.	"	Montreal.....	106250	96350	100610	120150	110410	100200	89790	107910	116250	112300	121250	144580
Hams, medium size.....	"	"	117500	108640	108950	128400	110200	99790	96040	112080	114160	116250	122290	136660
Pork heavy Can. short Cut	"	"	162290	166660	165620	217700	180520	155330	123120	137700	163540	155620	180200	194370
Mess.....	Bbl.	"	162290	166660	165620	217700	180520	155330	123120	137700	163540	155620	180200	194370
Lard, pure.....	Lb.	Toronto.....	8985	8955	8989	1245	8882	8636	8717	8672	8736	8668	8926	1060
(c) Sheep, mutton and lamb:														
Sheep, Ewes, light.....	Cwt.	Toronto.....	55000	49910	48120	49330	36540	33330	29230	31870	33540	34370	36390	33390
Mutton, dressed.....	"	"	84280	71040	72500	70830	65230	59790	48750	53440	57080	60000	64580	60000
Lamb, dressed.....	"	"	114100	80330	94090	94560	80120	74320	66840	74720	81660	85620	90850	81250



## WHOLESALE PRICES, CANADA, 1902-1913.

	Unit	Market	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<b>I. Grains and Fodder.</b>														
(a) Grains:—														
Wheat Manitoba Northern No. 1	Bush.	Winnipeg.....	7291	7875	9165	9031	7004	8809	1-0397	1-0856	1-0001	9553	9744	8810
" Ontario No. 2	"	Toronto.....	7300	7331	9466	9238	7618	8381	9043	1-0810	9810	8429	9767	9137
Barley Canada Western No. 3	"	Winnipeg.....	3783	3191	3958	3745	4122	4966	4879	5157	4666	6261	5779	4825
" Ontario No. 2	"	Toronto.....	4753	4385	4382	4711	4900	5900	6073	5916	5400	6850	7928	5513
Oats Canada Western No. 2	"	Winnipeg.....	3675	3137	3628	3628	3387	4002	3941	4029	3481	3645	4074	3374
" Ontario White No. 2	"	Toronto.....	4022	3136	3234	3782	3379	4350	4452	4527	3575	3878	4631	3714
Corn American Yellow No. 3	"	"	6179	5395	5458	5366	5425	6075	7608	7278	6569	6620	7612	6630
Flax Seed N.W. Manitoba No. 1	"	Winnipeg.....	.....	6558	6370	6941	7800	1-2800	1-1600	1-3800	2-0420	2-2210	1-7079	1-1450
Peas Ontario No. 2	"	Toronto.....	7779	5106	5995	6695	6708	8043	8897	8775	7908	8897	1-1206	9905
Rye Ontario No. 2	"	"	5350	5106	5995	6695	6708	7045	8031	7152	6708	7382	1-2964	8925
(b) Fodder:—														
Hay No. 1	Ton.	Montreal.....	9-5400	10-5000	9-7700	9-0300	10-1800	15-3700	13-9300	13-0200	13-6250	13-0210	17-2500	14-0420
" Timothy, baled No. 1	"	Toronto.....	9-6980	9-0230	8-5830	7-7810	9-3330	14-1880	13-1040	12-7710	13-6880	13-1470	17-2700	12-5210
" Straw baled	"	"	5-2080	5-0830	5-9880	5-9880	5-9160	7-7810	8-1450	7-7080	7-2080	6-4790	10-0000	13-1040
Bran Ontario	"	"	15-6700	14-4100	14-8900	13-7200	16-1800	20-3700	20-7000	22-0200	20-6450	22-2083	23-7916	19-9360
Shorts Ontario	"	"	18-6000	17-2500	17-2000	17-2900	18-4700	21-6300	22-5000	23-9700	22-4160	23-9170	26-1660	21-8750
<b>II. Animals and Meats.</b>														
(a) Cattle and Cattle Products:—														
Cattle, western, butchers	Cwt.	Winnipeg.....	4-0200	3-7290	3-7080	3-5410	3-8330	4-4160	4-0620	4-1350	4-9600	5-0980	5-8480	6-7730
" butchers choice Steers	"	Toronto.....	4-9000	4-4700	4-4950	4-5700	4-5180	4-8540	4-9520	5-6440	6-1540	5-9080	6-7580	6-9910
Beef dressed hindquarters	"	"	8-3060	6-5000	6-5898	6-5220	6-7700	7-2086	7-8070	9-3650	11-4160	11-0630	12-9080	12-8000
" forequarters	"	"	5-4170	5-3190	5-1250	5-3860	5-3060	5-3060	6-0210	6-2710	8-0000	7-4580	8-5625	11-7451
Beef plate	"	Montreal.....	7-7500	7-7610	7-5740	8-1900	9-0780	8-9230	8-8980	9-3900	10-1450	8-0830	8-3120	10-200
Veal	"	Toronto.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11-589
(b) Hogs and hog products:														
Hogs, dressed	Cwt.	Toronto.....	6-5470	5-8330	5-0930	6-2200	6-8120	6-4390	5-9500	7-2970	8-4830	6-6150	7-6860	9-0830
" Bacon, breakfast, Eng. boneless	"	"	8-5100	8-0600	7-1930	8-5730	9-6580	9-2450	8-8800	10-5320	11-7400	9-6770	11-0570	13-0850
Hams, medium size	"	Montreal.....	14-5830	14-3330	12-9370	14-2500	16-2290	14-9300	14-5330	15-4790	19-0620	15-8750	16-7900	19-4800
Pork heavy Can. short cut	"	"	13-2700	13-3120	11-8950	12-5400	14-3750	14-7500	13-8950	18-0410	15-6670	16-0910	19-0300	19-0300
" mess	Brl.	"	23-0000	22-1450	17-9850	19-9210	21-6870	23-3120	21-9160	25-5800	29-3120	23-3750	25-6340	29-6800
Lard, pure	Lb.	Toronto.....	1-104	1-001	0-782	0-927	1-139	1-222	1-206	1-387	1-531	1-127	1-339	1-429
Sheep, mutton and lamb:	Cwt.	Toronto.....	3-5830	3-3330	3-4500	3-8930	4-6290	4-7080	4-2180	4-0160	4-7440	4-1590	4-8930	5-6065
Mutton, dressed	"	"	5-8860	7-8200	8-3620	9-4650	10-8810	10-8080	10-5230	9-8270	9-062	8-4380	9-2590	10-3750
Lamb, dressed	"	"	8-4250	7-8120	9-3440	11-2710	11-4320	11-9720	11-1460	12-2500	13-6460	11-6660	13-8500	16-4615

\*Farmers' Market.

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

	Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>II. Animals and Meats—Continued.</b>														
(d) Poultry:														
Fowls.....	Lb.		.0950	.0775	.0750	.0595	.0790	.0693	.0625	.0575	.0662	.0530	.0550	.0510
Turkeys.....	"		.1150	.1025	.0956	.1037	.0890	.0850	.0767	.0843	.0940	.0982	.0905	.0905
<b>III. Dairy products.</b>														
Butter, creamery, finest.....	Lb.		.2022	.2329	.2337	.2404	.2227	.1989	.1908	.1904	.1960	.2035	.2225	.2108
" " solids.....	"		.2111	.2606	.2341	.2393	.2225	.1917	.19787	.1817	.1800	.1895	.1877	.1971
" " dairy prints.....	"		.1467	.1650	.1730	.1913	.1906	.1529	.1450	.1357	.1600	.1610	.1809	.1652
Cheese, Western, coloured.....	"		.982	.1005	.1048	.1049	.1049	.0888	.0854	.0853	.0830	.1019	.1121	.0994
Milk.....	Gal.		.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1400	.1550
Milk.....	8 gals.		.9350	.9350	.9516	.9516	.9666	.9666	.9766	.1-0516	1-0733	1-0733	1-0816	1-0816
Milk.....	Gal.		.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200
Eggs, fresh.....	Doz.		.1743	.1630	.1462	.1723	.1437	.1639	.1569	.1544	.1469	.1711	.1756	.1848
Eggs.....	"		.1598	.1631	.1359	.1473	.1258	.1279	.1200	.1044	.1254	.1449	.1738	.1315
<b>IV. Fish.</b>														
Cod, dry, market size.....	Lb.		.0400	.0400	.0325	.0400	.0400	.0400	.0400	.0350	.0400	.0400	.0400	.0400
Haddock, dry.....	"		.0300	.0300	.0250	.0300	.0300	.0300	.0300	.0250	.0300	.0300	.0300	.0300
Mackerel, salted.....	"		.0700	.0400	.0500	.0500	.0500	.0600	.0550	.0500	.0550	.0700	.0400	.0700
Finnan haddies.....	"													
Herring, salted.....	"		.0200	.0200	.0125	.0200	.0200	.0200	.0200	.0225	.0225	.0200	.0225	.0225
Lobsters, canned.....	"		.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2500	.2500	.2500	.2500	.3000
" " fresh.....	"		.0800	.0800	.0850	.0850	.0900	.0900	.0900	.0900	.0900	.0900	.0900	.1000
Halibut, white, fresh.....	"		.0600	.0600	.0600	.0600	.0600	.0600	.0600	.0700	.0700	.0700	.0700	.0700
Whitefish, fresh.....	"		.0889	.0702	.0693	.0718	.0691	.0741	.0766	.0650	.0612	.0804	.0779	.0755
Salmon Trout, fresh.....	"		.0693	.0718	.0693	.0718	.0696	.0685	.0706	.0612	.0568	.0764	.0775	.0745
B.C. Sockeye salmon, canned.....	Case.		4.7000	4.5000	4.5000	4.5500	3.7500	4.5000	4.5000	3.7500	3.5000	4.5000	5.0000	4.6000
Dry Fish, prices pd. to fishermen.														
Cod.....	Quintal.		4.0000	4.2500	3.5000	4.0000	3.6400	3.0700	3.0900	2.6000	3.2500	4.1700	3.6600	4.3200
Haddock.....	"		3.0000	3.2500	2.3000	3.1000	2.6000	1.9000	1.7000	1.6600	2.3700	2.7000	2.7500	3.3400
Hake.....	"		3.0000	2.2500	1.5000	2.4000	1.9500	1.5000	1.4000	2.0000	2.6000	3.1600	2.5000	2.8000
Pollack.....	"		2.0000	1.5000	1.0000	1.8000	1.8500	1.3000	1.1400	1.4500	1.9000	2.3300	2.3100	2.3100
Mackerel.....	"		11.5000	6.7500	7.1000	8.3000	3.0000	10.7500	8.5000	8.0000	8.0000	11.0000	5.5000	6.2500
N. S. herring.....	Brl		3.5000	3.0000	3.0000	3.7500	3.7500	2.4500	1.5000	2.5000	3.2500	3.8000	3.2500	3.2500
Alewives.....	"		3.0000	4.0000	4.5000	3.5000	2.6000	3.5000	3.0000	.....	3.6300	4.2500	4.0000	4.0000
<b>V. Other Foods.</b>														
(a) Fruits and Vegetables:														
i. Fresh fruit, native:														
Apples, good seasonable.....	Brl.		2.7650	2.7650	2.0150	2.0620	2.6710	2.2650	1.7650	1.8900	2.8590	2.8120	1.9550	2.8120

## WHOLESALE PRICES, CANADA, 1902-1913.

Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>II. Animals and Meats—Con.</b>													
(d) Poultry:													
Fowls.....	Montreal.....	0735	0830	0791	0855	0785	0895	0812	1315	1188	1133	0929	1130
Turkeys.....	".....	1210	1350	1463	1445	1295	1335	1356	1755	1604	1754	1812	2030
<b>III. Dairy Products:</b>													
Butter, creamery, finest.....	Montreal.....	2104	2112	1963	2271	2362	2541	2700	2537	2658	2511	2936	2753
" " solids.....	Toronto.....	1981	1952	1825	2119	2225	2304	2375	2288	2393	2361	2918	2731
" " dairy prints.....	".....	1675	1681	1475	1877	1973	2250	2388	2250	2185	2067	2632	2353
Cheese, western, coloured.....	Montreal.....	1069	1157	0930	1120	1256	1261	1255	1207	1273	1258	1392	1279
Milk.....	".....	1550	1550	1550	1350	1350	1730	1900	1790	1792	1792	1883	2000
8 gals.....	Toronto.....	10833	10833	10833	10833	10833	10833	10833	10833	10833	10833	10833	10833
Milk.....	Victoria.....	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200	2200
Gal.....	Montreal.....	1922	1854	2203	2141	2240	2340	2340	2650	2680	2725	3239	3511
Eggs, fresh.....	".....	1489	1485	1939	1727	1696	2046	1988	2306	2260	2112	2568	2429
Eggs.....	Toronto.....	0350	0400	0400	0400	0400	0400	0300	0450	0504	0562	0575	0604
Cod, dry, market size.....	Canso, N.S.....	0250	0300	0300	0300	0300	0300	0300	0300	0375	0433	0416	0404
Haddock, dry.....	".....	0700	0700	0700	0600	0600	0700	0500	0800	0866	0870	0900	0766
Mackerel, salted.....	".....	0225	0225	0200	0200	0200	0225	0225	0225	0233	0250	0320	0245
Finnan haddies.....	".....	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Herring, salted.....	".....	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Lobsters, canned.....	".....	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700
" fresh.....	".....	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854
Halibut, white, fresh.....	".....	0758	0829	0879	0827	0881	1018	1000	0983	1083	1130	1130	1130
Whitefish, fresh.....	Toronto.....	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000
Salmon Trout, fresh.....	".....	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800
B.C. Sockeye salmon, canned.....	Victoria.....	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000	30000
Dry Fish, prices paid to fishermen:													
Cod.....	Halifax.....	36800	40000	53500	58700	55000	55000	35000	45000	60000	67500	50000	55000
Haddock.....	".....	27800	30700	40400	42500	40000	40000	25000	30000	45000	47500	35000	35000
Hake.....	".....	24000	27500	41600	40000	30000	40000	30000	22500	37500	45000	30000	30000
Pollock.....	".....	31200	27000	37200	41200	32500	40000	25000	25000	40000	47500	32500	35000
Mackerel.....	".....	102500	87500	95000	85000	100000	100000	65000	80000	110000	120000	110000	80000
N.S. herring.....	".....	40000	42500	38500	40000	40000	35000	35000	35000	40000	40000	37500	37500
Alewakes.....	".....	30000	40000	32500	50000	57500	52500	40000	35000	50000	52500	37500	35000
<b>IV. Fish.</b>													
Cod, dry, market size.....	Canso, N.S.....	0350	0400	0400	0400	0400	0400	0300	0450	0504	0562	0575	0604
Haddock, dry.....	".....	0250	0300	0300	0300	0300	0300	0300	0300	0375	0433	0416	0404
Mackerel, salted.....	".....	0700	0700	0700	0600	0600	0700	0500	0800	0866	0870	0900	0766
Finnan haddies.....	".....	0225	0225	0200	0200	0200	0225	0225	0225	0233	0250	0320	0245
Herring, salted.....	".....	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000	3000
Lobsters, canned.....	".....	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
" fresh.....	".....	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700	0700
Halibut, white, fresh.....	".....	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854	0854
Whitefish, fresh.....	Toronto.....	0758	0829	0879	0827	0881	1018	1000	0983	1083	1130	1130	1130
Salmon Trout, fresh.....	".....	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000	45000
B.C. Sockeye salmon, canned.....	Victoria.....	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800	36800
Dry Fish, prices paid to fishermen:													
Cod.....	Halifax.....	36800	40000	53500	58700	55000	55000	35000	45000	60000	67500	50000	55000
Haddock.....	".....	27800	30700	40400	42500	40000	40000	25000	30000	45000	47500	35000	35000
Hake.....	".....	24000	27500	41600	40000	30000	40000	30000	22500	37500	45000	30000	30000
Pollock.....	".....	31200	27000	37200	41200	32500	40000	25000	25000	40000	47500	32500	35000
Mackerel.....	".....	102500	87500	95000	85000	100000	100000	65000	80000	110000	120000	110000	80000
N.S. herring.....	".....	40000	42500	38500	40000	40000	35000	35000	35000	40000	40000	37500	37500
Alewakes.....	".....	30000	40000	32500	50000	57500	52500	40000	35000	50000	52500	37500	35000
<b>V. Other Goods.</b>													
(a) Fruits and Vegetables:													
1. Fresh fruit, native:													
Apples, good seasonable.....	Toronto.....	27180	19840	20150	27500	28900	28120	27400	35930	31700	41770	35830	31670

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>V. Other Foods—Continued.</b>													
(a) Fruits and Vegetables—Con.													
i. Fresh fruit, native—Con.													
ii. Peaches, Leno Covers, No 1.....	"	1-05 0	1-05 00	1-67 50	1-67 50	1-87 50	1-08 75	1-62 50	1-59 30	1-66 00	1-67 2	1-92 7	1-76 00
Pears.....	"	60 00	64 16	60 83	73 33	50 00	64 58	32 50	30 00	49 16	45 53	35 00	32 50
Plums.....	"	78 33	67 50	94 16	65 00	70 00	62 50	51 66	40 00	59 16	54 16	44 16	49 16
Grapes, blue.....	Toronto.....	20—	22—	15—	20—	18—	20—	15—	20—	16—	19 25	36 25	38 00
Cherries, sour red.....	"	35	35	25	40	30	40	40	40	22 5	10 00	10 50	9 25
Raspberries, red.....	"	91 25	85 00	105 00	91 25	88 75	78 75	86 25	90 00	67 50	10 00	10 50	9 25
Strawberries, Canadian.....	"	09 17	09 50	10 33	09 17	10 17	10 17	07 41	05 55	07 41	08 50	08 41	12 00
ii. Fresh Fruit, Foreign:	"	12 16	11 16	12 06	09 13	07 83	11 33	07 71	07 75	06 50	09 00	09 18	10 25
Bananas, yellow, crated.....	"	1-86 60	1-68 70	1-78 10	1-66 60	1-54 50	1-51 60	1-58 10	1-59 30	1-66 00	1-67 2	1-92 7	1-76 00
Lemons, Messina.....	"	3-85 00	3-82 10	3-81 30	3-39 30	3-94 60	4-14 60	3-02 10	3-08 78	3-10 70	3-00 00	2-75 00	2-96 00
Lemons, verdellis.....	"	7-45 00	6-40 00	6-06 00	4-47 50	4-47 50	6-47 50	4-09 60	4-75 00	4-75 00	4-37 00	4-37 00	4-04 00
Oranges, navel.....	"	6-12 50	4-08 70	3-87 50	3-25 50	4-09 00	4-09 00	4-00 00	3-86 50	3-86 50	3-62 50	3-35 00	3-35 00
Oranges, Valencia.....	"	5-45 00	5-18 80	5-45 00	4-37 50	5-27 10	5-14 10	5-55 00	4-92 90	5-56 30	4-50 00	7-00 00	5-12 50
iii. Dried Fruits:													
Apples, evaporated.....	"	10 83	11 85	07 16	08 76	09 64	07 12	05 65	05 47	08 89	09 19	08 54	08 29
Currants, Patras.....	"	07 46	06 91	06 40	06 54	05 27	04 79	04 71	03 85	05 39	05 58	08 47	10 29
Prunes, Bosnia.....	"	05 66	07 24	06 25	07 74	04 25	05 94	06 44	06 50	06 33	05 82	07 33	07 35
Raisins, Sultanias.....	"	12 60	15 75	10 72	08 20	06 97	06 75	07 04	09 14	10 66	12 50	12 58	11 14
iv. Fresh Vegetables:													
Potatoes.....	Montreal.....	74 75	83 13	56 04	85 00	59 50	43 15	37 50	42 58	63 96	57 60	41 25	53 29
Potatoes, Ontario.....	Toronto.....	61 12	79 50	43 08	79 95	60 20	44 29	30 16	37 29	55 58	70 29	38 66	42 70
Beans, handpicked.....	"	1-63 10	1-99 30	1-22 50	1-40 80	2-59 00	1-43 70	83 70	73 60	88 70	1-13 50	1-70 80	1-70 80
Onions, Canadian red.....	Montreal.....	2-75 00	3-36 00	2-15 00	2-59 00	2-15 00	2-12 00	1-56 00	2-08 00	2-83 00	1-88 00	1-88 00	2-85 00
Turnips.....	Toronto.....	37 81	31 25	45 31	41 56	44 68	43 83	39 37	27 81	38 43	48 43	61 56	70 31
Tomatoes.....	"	38 13	47 50	41 75	33 13	31 00	38 75	30 83	30 50	32 08	26 00	25 00	34 16
v. Canned Vegetables:													
Canned corn, standards 2's.....	Toronto.....	1-11 60	1-15 00	1-03 30	92 20	88 10	93 30	71 40	65 80	86 30	97 60	1-01 30	77 60
Canned peas, standards 2's.....	"	1-22 70	1-28 20	1-07 20	94 40	88 90	87 20	88 90	78 20	85 60	77 20	81 80	78 40
Canned tomatoes, standards 3's.....	"	1-20 60	1-37 50	1-05 30	90 80	86 20	87 60	83 70	78 50	1-07 90	86 60	89 60	81 50
(b) Miscellaneous Groceries:—													
i. Breadstuffs:—													
Flour, Straight Rollers.....	Toronto.....	4-48 50	4-09 30	4-32 00	3-15 60	2-90 20	3-68 30	3-53 90	4-06 80	4-01 40	3-32 90	3-38 50	3-30 00
" Strong Bakers.....	"	5-18 60	5-31 40	4-59 10	3-94 30	3-41 40	4-02 20	3-77 20	4-62 00	4-81 00	3-70 40	3-89 30	3-90 20
" Winter Wheat Patents.....	"	5-18 20	5-35 20	4-71 70	4-01 70	3-51 60	4-16 20	4-16 60	4-60 00	4-78 90	3-83 10	3-83 10	3-83 10
" Manitoba First Patents.....	"	5-53 90	5-68 50	5-00 00	4-24 50	3-63 80	4-20 40	4-09 50	5-03 30	5-20 80	4-00 00	4-16 40	4-10 70



	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>V. Other Foods—Continued.</b>														
(a) Fruits and Vegetables—Con.														
i. Fresh fruit, native—Con.														
Peaches, Leno Covers No. 1....	11 qt. bkt.	"	4875	4750	8375	7000	5625	17850	10625	7250	6320	9375	8193	6395
Pears.....	6 qt. bkt.	"	4000	3666	4833	4083	4833	5833	4916	5416	5900	4375	5575	4411
Plums.....	6 qt. bkt.	"	5416	3083	6250	4416	11080	6583	8333	5750	4875	4875	4881	3636
Grapes, blue.....	Bkt.	Toronto.....	3625	3313	2375	3575	3500	3012	2937	2687	2750	1844	1948	2762
Cherries, sour red.....	Bkt.	"	11500	9375	11500	11250	10000	14625	11375	10255	18775	11750	10347	8670
Raspberries, red.....	Bkt.	"	6812	6910	1071	1000	1067	1400	1300	1075	1100	1466	1570	1558
Strawberries, Canadian.....	Box	"	1087	9825	9950	11100	1237	1316	1055	9833	9900	1256	1340	1416
ii. Fresh Fruit, Foreign:														
Bananas, yellow, crated.....	Bunch	"	17100	17620	17390	18540	18930	18540	18310	19100	18330	15310	16460	17920
Lemons, Messina.....	Box	"	27100	35250	27190	25900	28880	39810	27920	30970	29060	30360	30000	37888
Lemons, verdellis.....	"	"	36500	39700	35000	47040	57540	50500	48330	45410	55330	45500	54500	48968
Oranges, navels.....	"	"	37777	34700	31010	28888	37990	33680	28900	.....	29300	31140	27810	38500
Oranges, Valencia.....	"	"	52220	49170	49000	48590	50730	46250	48030	38380	45150	46700	44700	63214
iii. Dried Fruits:														
Apples, evaporated.....	Lb.	"	6892	6629	6618	6898	1083	9087	7955	791	9821	1341	9079	9756
Currants, Patras.....	"	"	6668	6636	6825	6825	6882	6853	6825	6825	6825	6825	6821	6768
Prunes, Bosnia.....	"	"	6711	6650	6650	6650	6650	6650	6650	6650	6650	6650	6650	6650
Raisins, Sultanias.....	"	"	1089	1054	6825	6775	6772	1375	1104	6791	6870	1104	1216	1083
iv. Fresh Vegetables:														
Potatoes.....	Bag	Montreal	7725	8917	7705	6875	6570	8400	8330	8060	9700	12090	13240	7372
Potatoes, Ontario.....	"	Toronto.....	7645	11170	9916	8062	8837	9791	9541	8062	5830	12440	14504	8726
Beans, handpicked.....	Bush.	"	16060	19120	15580	17100	17470	16540	19600	21640	23330	20690	28100	24400
Onions, Canadian red.....	Cwt.	Montreal.....	29000	21400	39000	57000	25900	17500	.....	.....	12910	20630	34440	23340
Turnips.....	Bag	Toronto	6750	6062	5656	3531	3218	4781	3937	3781	4416	4563	5725	4281
Tomatoes.....	Bkt.	"	4189	3375	4833	3055	3916	4333	3416	3437	4000	3640	3600	6279
v. Canned Vegetables:														
Canned corn, standards 2's.....	Doz.	"	8510	9510	11890	10690	8820	9410	9360	8380	8677	9030	10490	9437
Canned peas, standards 2's.....	"	"	8680	9940	11380	8400	6950	8830	9390	10520	10950	13310	12650	10383
Canned tomatoes, stand. 3's.....	"	"	10600	14080	11300	11960	11020	11260	11550	8969	8767	15140	15916	12560
(b) Miscellaneous groceries:—														
i. Breadstuffs:—														
Flour, Straight Rollers.....	Brl.	Toronto.....	34000	34890	46430	45090	33830	41830	4080	52200	49540	44500	46670	45250
" Strong Bakers.....	"	"	38000	39600	48500	49660	39370	44770	53520	53310	50830	46330	49200	46750
" Winter Wheat Patents.....	"	"	39080	39680	51450	53620	45920	49450	55000	55290	52400	46750	49800	49070
" Manitoba First Patents.....	"	"	40870	43040	51290	51950	44750	51700	60700	57830	56830	53130	55960	53750

\*California Prunes, size 70-80.

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

	Unit.	Market.	1890	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900	1901
<i>V. Other Foods—Continued.</i>														
(b) Miscellaneous groceries—Con.														
i. Breadstuffs—Con.														
i. Bread, Plain White...	Lb.		.0200	.0200	.0200	.0210	.0213	.0221	.0225	.0225	.0225	.0225	.0267	.0267
"	1 lb. loaf	Victoria...	.0333	.0333	.0333	.0333	.0333	.0266	.0266	.0266	.0266	.0266	.0266	.0266
"	Lb.	Toronto...	.0600	.0600	.0600	.0600	.0600	.0562	.0562	.0600	.0591	.0570	.0554	.0591
Biscuits, soda...	Lb. 98 lb. bag	"	*4.3620	*5.1270	*3.8790	*4.0720	*4.0401	*3.9350	*3.0060	*3.1700	*3.9580	*3.7970	*3.4970	*3.8870
Oatmeal, Standard...	Lb.	"	.0461	.0525	.0512	.0490	.0475	.0475	.0475	.0508	.0475	.0487	.0487	.0487
Rice, Patna...	Lb.	"	.0631	.0607	.0537	.0520	.0473	.0466	.0415	.0387	.0409	.0427	.0488	.0456
Tea, Coffee—														
i. Tea, Good common Japan...	Lb.	Montreal...	.1762	.1825	.1700	.1700	.1725	.1758	.1700	.1700	.1700	.1700	.1700	.1900
"	"	Toronto...	.2245	.2225	.1935	.2137	.2166	.2066	.1777	.1329	.0993	.0958	.1064	.1118
"	"	"	.2750	.2800	.2791	.2550	.2208	.2160	.2075	.1937	.1160	.1100	.1218	.1039
Chocolate, Diamond...	"	"	.2400	.2400	.2333	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200	.2200
iii. Sugar, etc.—														
Sugar, Montreal granulated...	Cwt.	Toronto...	7.1040	5.9210	4.6210	5.2500	4.4800	4.0920	4.5410	4.3800	4.6150	4.6020	4.6940	4.8090
"	"	"	5.8380	4.7760	3.8480	4.4880	3.7590	3.4450	3.7880	3.8150	4.0230	4.1180	4.2630	4.3610
Sugar, Yellow (in bbls.)...	Gal.	"	.7958	.6462	.4075	.3579	.3083	.3083	.3125	.2991	.3350	.3525	.2587	.3187
Molasses, New Orleans...	Lb.	"	.1160	.0850	.0845	.0804	.0812	.0812	.0885	.0700	.0714	.0879	.0881	.0970
Honey, white clover strained...	Lb.	Montreal...	.0750	.0637	.0670	.0760	.0679	.0675	.0900	.0614	.0591	.0883	.0983	.0900
iv. Condiments:														
Salt, Fine...	Bbl.	Windsor...					.6000	.5233	.7000	.7000	.7500	.7325	.7075	.8000
"	"	"					1.5000	1.2919	1.3666	1.4000	1.2000	1.2000	1.2000	1.2000
"	"	"					1.6000	1.2919	1.3666	1.4000	1.3000	1.3000	1.3000	1.3000
"	"	"					2.0000	1.9900	2.0000	1.9500	1.9500	2.0000	2.0000	2.0000
"	"	"					3.0000	2.9250	2.8000	2.8000	2.7790	2.7500	2.7500	2.8250
Pepper, black, pure best...	Lb.	Montreal...	4.8000	4.8000	3.8000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000	3.0000
"	"	Toronto...	.2183	.1908	.1375	.1463	.1366	.1100	.1100	.1195	.1366	.1341	.1791	.1850
Vinegar, white wine, proof...	Gall.	Ottawa...	33.35	.3300	.3300	.3300	.3300	.3300	.3300	.3300	.3200	.3200	.3200	.3000
Strength...	Lb.	Toronto...	.3120	.3100	.3100	.2870	.2650	.2387	.2600	.2495	.2716	.2700	.2700	.2700
Cream of tartar...	Cwt.	Montreal...	2.0500	2.4250	2.4000	2.4000	2.4000	2.4000	2.4000	2.3750	.23000	2.3000	2.3000	2.0700
Soda, Bicarbonate of...														
vi. Textiles														
(a) Woollens—														
Wool, Ontario washed...	Lb.	Toronto...	.2133	.1889	.1783	.1787	.1729	.2123	.2037	.2089	.1793	.1472	.1772	.137.
"	"	"	.1237	.1116	.1029	.1064	.1064	.1291	.1129	.1173	.1083	.0904	.1054	.081.
Yarn, Canadian worsted, 4...	Lb.	"	.4600	.4600	.4300	.4450	.4450	.4300	.4950	.4950	.4500	.4250	.4250	.3630
Woolen underwear, knitted...	Doz.	"												
Penman's line, 95, size, 36 in.			7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.5000	7.6000	8.1600	7.5000

## WHOLESALE PRICES, CANADA, 1902-1913—Continued.

	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>V. Other Foods—Continued.</b>														
(b) Miscellaneous groceries—Con.														
i. Breadstuffs—Con.														
Bread, plain white.....														
Lb.		Toronto	-.0267	-.0267	-.0275	-.0269	-.0244	-.0288	-.0320	-.0330	-.0320	-.0276	-.0267	-.0312
1 lb loaf		Victoria	-.0266	-.0266	-.0266	-.0500	-.0500	-.0500	-.0500	-.0500	-.0500	-.0500	-.0500	-.0500
Biscuits, soda		Toronto	-.0641	-.0650	-.0650	-.0650	-.0650	-.0650	-.0650	-.0716	-.0750	-.0730	-.0700	-.0700
Oatmeal, Standard, 98 lbs.		Bags	*5.0200	*4.1620	*4.8580	*5.0370	*4.7580	*5.7080	*6.2320	*2.8250	2.4360	2.5540	2.6670	2.4350
Rice, Panna.....		"	-.0487	-.0518	-.0525	-.0525	-.0525	-.0527	-.0559	-.0542	-.0592	-.0575	-.0575	-.0641
Tapioca, Medium Pearl.....		"	-.0379	-.0327	-.0342	-.0343	-.0650	-.0712	-.0579	-.0454	-.0541	-.0658	-.0675	-.0558
ii. Tea, Coffee:—														
Tea, good common Japan.....		Montreal	-.1912	-.2000	-.2000	-.1858	-.1800	-.1912	-.2150	-.2291	-.2262	-.2237	-.2250	-.2208
Coffee, Rio.....		Toronto	-.0903	-.0914	-.0948	-.1108	-.0966	-.0925	-.0925	-.0925	-.1320	-.1950	-.2329	-.2016
Coffee, Santos.....		"	-.1000	-.1031	-.1143	-.1200	-.1075	-.1053	-.1254	-.1366	-.1590	-.2150	-.2450	-.2341
Chocolate, Diamond.....		"	-.2375	-.2500	-.2500	-.2500	-.2500	-.2491	-.2458	-.2500	-.2400	-.2400	-.2400	-.2400
iii. Sugar, etc:—														
Sugar, Montreal Granulated.....	Cwt.	Toronto	3.9210	3.9000	4.66 0	5.1960	4.2880	4.4750	4.7580	4.7160	5.0875	5.1130	5.3170	4.5060
Sugar, yellow (in brls.).....		"	3.6020	3.4880	3.9440	4.6870	3.8130	4.1250	4.3580	4.5160	4.6830	4.7130	4.9170	4.1790
Molasses, New Orleans.....	Gal.	"	-.2835	-.2633	-.2708	-.3025	-.3250	-.3216	-.3241	-.2883	-.3000	-.2883	-.2800	-.2800
Honey, white clover strained.....	Lb.	Montreal	-.0918	-.0797	-.0739	-.0752	-.1060	-.1150	-.1170	-.1240	-.1094	-.1116	-.1200	-.1137
Maple Sugar.....		"	-.0820	-.0831	-.0891	-.0758	-.0852	-.0966	-.0883	-.0278	-.0908	-.0930	-.0899	-.1075
iv. Condiments:—														
Salt, Fine.....	Bbl.	Windsor	-.0800	-.0665	-.8583	-.8500	-.8500	-.7308	-.8200	-.8200	-.8500	-.8200	-.8200	-.8550
" Dairy.....	"	"	1.2000	1.2000	1.1166	1.1000	1.1000	1.1616	1.1900	1.1900	1.2800	1.2800	1.2800	1.2600
" Cheese.....	"	"	1.3000	1.3000	1.1750	1.1500	1.1500	1.2108	1.3700	1.3700	1.4600	1.4600	1.4600	1.4400
" Table.....	"	"	2.1000	2.1666	2.1166	2.1000	2.1000	2.1250	2.1500	2.2000	2.2900	2.2900	2.2900	2.3400
" Fine in 3 lb bags.....	Gross	Montreal	2.8500	2.8820	2.7500	2.7500	2.7500	2.8750	2.9080	3.0000	3.0000	3.0000	3.0000	3.0000
Pepper, black, pure best.....	Lb.	Toronto	-.1850	-.1850	-.1850	-.1850	-.1863	-.1800	-.1800	-.1458	-.1658	-.1706	-.2075	-.2047
Vinegar, white wine, proof strength.....	Gall.	Ottawa	-.3000	-.3000	-.2800	-.2800	-.2600	-.2400	-.2300	-.2300	-.2416	-.2200	2.400	2.400
Cream of tartar.....	Lb.	Toronto	-.2700	-.2708	-.2750	-.2750	-.2750	-.2945	-.2350	-.2350	-.2530	-.2500	-.2325	-.2671
Soda, bicarbonate of.....	Cwt.	Montreal	2.0000	2.0000	2.0000	2.0000	2.0000	2.0000	1.9930	1.9750	1.7500	1.5000	1.4250	1.4250
VI. Textiles.														
(a) Woolens:														
Wool, Ontario washed.....	Lb.	Toronto	-.1331	-.1608	-.1856	-.2418	-.2583	-.2341	-.1529	-.2008	-.2140	-.2014	-.1994	-.2443
Wool, Ontario unwashed.....	"	"	-.0725	-.0898	-.1108	-.1508	-.1650	-.1362	-.0871	-.1193	-.1320	-.1381	-.1347	-.1568
Yarn, Canadian worsted, 4 ply.....	"	"	-.3600	-.3600	-.4000	-.4750	-.5250	-.5500	-.5000	-.4750	-.5375	-.5400	-.5433	-.5720
Woolen underwear, knitted, Penman's line, 95, size, 36 in.	Doz.		7.5000	7.5000	8.0000	8.5000	9.0000	9.0000	9.0000	8.9160	9.0000	9.0000	9.0410	9.2500

\*Price per barrel of 196 lb.

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>VI. Textiles—Continued.</b>													
(a) Woollens—Continued.													
Beaver Cloth, 28 oz., 55-56 in. wide, No. 4.....	Montreal.....								1-2000	1-1375	1-1875	1-4500	1-2500
(b) Cottons—													
Cotton, Raw, Upland Middling	New York.....	1109	0860	0769	0832	0700	0729	0792	0715	0597	0658	0861	0863
Gray cottons.....	Montreal.....	1925	2447	2162	2081	2041	1879	1967	1892	1849	1802	2051	2191
Cottons, woven colour fabric	"	3200	3120	2980	3030	2969	2690	2654	2623	2579	2546	2856	2930
Prints.....	"				0670	0678	0674	0678	0671	0709	0716	0804	0774
Cottons, woven coloured	"							2900	2600	2500	2600	2600	3000
fabrics cottonade, 2 yds. per	"								2700	2600	2500	2400	2950
Denim, black, 2 yds. per	"							2535	2700	2600	2500	2400	2950
Denim, blue 2	"							2900	2900	2900	2600	2600	2700
Ticking	"							2565	2470	2375	2280	2328	2336
" 1-90 "	"							3045	3045	3045	2719	2936	2876
Shirting	"							3062	3062	3062	2400	2550	2876
" 2-95 "	"							3450	3450	3450	2490	2748	3200
Saxony	"							3052	3052	3052	2870	3000	3200
" 4-15 "	"							3900	3700	3515	3218	3315	3280
Flannelette	"							2812	2665	2762	2562	2470	2765
Gingham, apron, 4 50 yds. per	Montreal.....							2632	2720	2640	2560	2762	3250
dress, 7 yds. per.....	"												1600
C. warp, 4-10 yarn.....	"												1550
Demicord, 2-8.....	"												
(c) Silks:													
Silk, raw, Japan, flatures	New York.....	5-2429	4-0110	4-3266	4-5409	3-3627	3-7855	3-4072	3-4637	3-6376	4-4085	4-1690	3-5132
" " Italian, classical.....	"	5-2238	4-1865	4-4826	5-0289	3-6816	4-0373	3-6293	3-6404	3-8768	4-7706	4-5128	3-8466
Spool silk, 50 yds., "Letter A"	Montreal.....	6000	6500	5500	5250	5000	5000	5000	5000	5000	5000	4500	4500
Machine silk, 16 oz., "Prize Medal".....	"	9-6000	9-5000	9-2500	9-0000	9-0000	9-0000	9-0000	9-0000	8-7500	8-5000	8-5000	8-0000
(d) Jutes:													
Jute, first marks.....	"	6315	6292	6362	6312	6303	6263	6297	6268	6255	6289	6339	6308
Hessian, 10 1/2 oz., 40 in.....	"	6369	6350	6375	6343	6340	6326	6335	6326	6306	6348	6381	6402
(e) Flax products:													
Flax fibre.....	Hensall, Ont..	6800	6875	6775	6800	6850	6575	6675	6725	6700	6700	6108	6937
Tow, mixed.....	"	6200	6150	6150	6150	6250	6150	6250	6325	6350	6500	6500	6500
" fine.....	"												
Flax sewing twine, No. 1, 4-8 ply and larger.....	Doon, Ont.....	1800	1800	1800	1800	1800	1800	1800	1800	1800	1900	1800	1900



Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>VI. Textiles—Continued.</b>													
(a) Woollens— <i>Con.</i>													
Beaver cloth, 28 oz., 55-56 in. wide, No. 4.....	Yard	1-2500	1-3000	1-3083	1-3500	1-3916	1-4500	1-5208	1-5083	1-5500	1-5500	1-5549	1-6000
(b) Cottons:													
Cotton, raw, upland middling	Lb.	0-893	1-123	1-120	0-955	1-102	1-188	1-046	1-121	1-1498	1-1316	1-130	1-285
Grey cottons.....	"	2-125	2-113	2-438	2-256	2-512	2-315	2-498	2-441	2-833	3-088	2-816	2-941
Cottons, woven coloured fabrics.....	"	2-842	2-794	2-977	3-330	3-105	3-311	3-620	3-393	3-846	3-694	3-595	3-818
Prints.....	Yard.	0-743	0-710	0-787	0-735	0-786	0-904	0-832	0-854	0-855	0-900	0-883	0-947
Cottons, woven, coloured fabrics, cottonade, 2 yds. per Lb.	per Lb.	2-700	2-700	2-700	3-000	3-100	3-100	3-300	3-100	3-380	3-737	3-387	3-520
Denim, black 2.....	"	2-650	2-700	3-100	3-100	2-750	3-050	3-300	3-100	3-050	3-450	3-450	3-553
Denim, blue, 2.....	"	2-650	2-700	3-100	3-100	2-750	3-050	3-300	3-100	3-050	3-450	3-450	3-553
Ticking..... 4-15	"	2-700	2-700	2-905	2-905	2-800	2-905	3-527	3-112	3-112	3-320	2-948	3-035
Shirting..... 1-90	"	2-565	2-565	2-850	2-755	2-660	2-945	3-515	2-850	2-993	3-420	3-270	3-347
Shirting..... 4-35	"	2-936	2-936	3-154	3-371	3-194	3-045	3-590	3-262	3-371	3-697	3-362	3-398
Shirting..... 2-95	"	2-655	2-655	2-950	3-100	3-100	3-100	3-540	3-100	3-245	3-540	3-197	3-281
Saxony..... 6-90	"	3-435	3-060	3-240	3-244	3-280	3-450	4-312	3-685	3-685	4-020	3-902	4-230
Saxony..... 4-15	"	3-140	3-140	3-311	3-631	3-320	3-527	3-943	3-631	3-631	4-150	4-150	4-409
Flannelette..... 3-90	"	3-286	3-143	3-510	3-412	3-412	3-510	3-885	3-325	3-430	3-800	3-452	3-469
Gingham, apron, 4.50 yd. per dress, 7 yd., per.....	Lb.	2-762	2-762	2-844	3-071	3-155	3-071	3-226	3-094	3-440	3-938	3-712	3-768
C. warp, 4-10 yarn.....	"	2-762	2-762	3-006	3-238	3-325	2-970	2-750	3-150	3-268	3-797	3-622	3-723
Demircord, 2-8.....	"	1-425	1-425	1-700	2-000	2-000	2-200	2-400	2-000	2-300	2-600	2-542	2-800
Demircord, 2-8.....	"	1-525	1-525	1-750	2-100	2-050	2-250	2-450	2-100	2-300	2-600	2-608	2-800
(c) Silks:													
Silk, raw, Japan, filatures.....	"	3-824	4-1346	3-6416	3-9912	4-1632	5-0602	3-8902	3-8396	3-5244	3-4709	3-5470	3-7370
" " Italian, classical.....	"	4-1085	4-5241	3-8651	4-1085	4-3249	5-5812	4-1807	4-3777	4-0370	3-9690	3-8300	3-3040
Spool silk, 50 yd., "Letter A".....	Doz.	4-500	4-500	4-500	4-500	4-500	4-750	4-500	4-500	4-385	4-000	4-000	4-125
Machine silk, 16 oz., "Prize Medal".....	"	8-0000	7-5000	8-0000	8-0000	9-0000	9-5000	8-0000	8-0000	7-6250	8-0000	8-0000	8-2920
(d) Jutes:													
Jute, first marks.....	Lb.	0-295	0-322	0-327	0-422	0-564	0-498	0-365	0-320	0-327	0-472	0-495	0-693
Hessian, 10½ oz., 40 in.....	Yd.	0-349	0-359	0-363	0-410	0-506	0-520	0-416	0-401	0-402	0-495	0-596	0-701
(e) Flax products:													
Flax fibre.....	Lb.	0-825	0-850	1-000	0-937	0-950	0-950	0-925	0-900	0-936	1-025	1-088	1-104
Tow, mixed.....	"	0-500	0-500	0-500	0-450	0-500	0-500	0-875	0-150	0-150	0-175	0-200	0-200
Flax sewing twine, No. 1, 4-8 ply and larger.....	"	1-900	1-900	1-950	2-000	2-000	2-000	2-000	2-000	2-000	2-000	2-000	2-091

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

	Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>VI. Textiles—Continued.</b>														
(c) Flax products—Continued.														
(t) White Linen Rope, $\frac{1}{4}$ in. and larger	Lb.	Doon, Ont.	1800	1800	1800	1800	1800	1800	1800	1800	1800	1900	1900	1900
(t) Oilcloth, table, assorted patterns, 5-4 wide	12 yd.	Montreal	2-8750	3-0000	2-6500	2-4000	2-2250	2-0400	2-0000	1-9125	1-7900	1-7600	2-2400	2-1750
" floor, No. 3 quality	Sq. yd.	"	2500	2500	2500	2200	2000	2000	2000	2000	1883	1808	2050	2042
<b>VII. Hides, Leather, Boots and Shoes</b>														
(a) Hides and tallow:														
Hides, No. 1 inspected steers and cows	Lb.	Toronto	0529	0533	0473	0427	0341	0630	0554	0796	0864	0875	0902	0903
Calfskins, green, No. 1	Each.	"	0683	0725	0700	0700	0595	0691	0600	0975	1000	0959	0933	0879
Horse hides, No. 1	Lb.	"	2-7500	2-7290	2-6250	2-2870	1-3250	1-4270	1-5000	1-5160	1-7080	2-0000	1-9160	1-7500
Tallow, rendered, No. 1 stock	Lb.	"	0548	0550	0546	0607	0592	0563	0302	0352	0383	0481	0560	0551
(b) Leather:														
Leather, No. 1 Spanish sole	"	"	2557	2737	2612	2691	2550	2654	2850	2600	2595	2604	2825	2833
No. 1 slaughter sole, heavy	"	"	2491	2650	2650	2741	2575	2662	2600	2550	2645	2731	2931	2883
harness, No. 1 U.O.	"	"	2829	2850	2804	2960	2650	3133	3150	2937	3083	3116	3241	3112
(No. 1 R.)	"	"	3183	3541	3250	3750	3083	3525	2900	3525	4050	4050	4150	4150
heavy uppers	"	"												
(c) Boots and shoes:														
Boots, men's split Blucher	Pair	Ottawa	9000	9000	9006	9000	9000	9000	9000	9000	9000	1-0000	1-0000	1-0500
bals, pegged medium wt.	"	"	2-2500	2-2500	2-2000	2-2000	2-1500	2-1500	2-2000	2-2000	2-2000	2-2500	2-3500	2-4000
Boots, men's box calf, Blucher	"	"												
bals, Goodyear welt	"	"	1-2500	1-2500	1-2500	1-2500	1-2500	1-2500	1-2500	1-2500	1-2500	1-2500	1-3500	1-4000
Boots, women's Dongola Blucher bals, fair stitch	"	"												
<b>VIII. Metals and Implements</b>														
(a) Metals:														
i. Iron and steel:														
Pig iron, Foundry No. 1, N.S.	*Ton.	Montreal	24-7291	22 5000	21 3125	20 2500	20 3750	21 4166	20 9166	20 4166	18 5000	22 5000	26 6666	21 4545
" common No. 2	"	"	2-4500	2-1700	2-1270	1-9870	1-8810	1-7050	1-6580	1-5390	1-5080	1-9160	2-1770	2-1820
Iron, common bar	Cwt.	Toronto	3, 4100	2-9500	2-8700	2-8050	2-6400	2-4500	2-4800	2-3500	2-3700	2-5700	3-1500	2-9800
Iron, Black Sheets, 18 Gage	Cwt.	"												
" galvanized sheets, 16	"	"												
24 Gauge Queen's Head	"	"	5-6700	5-4000	5-1700	5-1900	4-7900	4-6200	4-2850	3-9800	3-8700	4-1600	4-4100	4-0300

	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>VI. Textiles—Continued.</b>														
(e) Flax products—Continued.														
White linen rope, $\frac{1}{4}$ in and larger.....			\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
(f) Oilcloths:	Lb.	Doon, Ont.....	.1900	.1900	.1950	.2000	.2000	.2000	.2000	.2000	.2000	.2000	.2225	.2233
Oilcloth, table, assorted patterns, 5-4 wide.....	12 yds.	Montreal.....	2.1000	2.1000	2.2375	2.1625	1.9833	2.0400	2.1900	2.1000	2.1830	2.2000	2.2000	2.2000
" floor, No. 3 quality.....	Sq. yd.	" .....	.2000	.2000	.2000	.1975	.1800	.1992	.2100	.2100	.2225	.2400	.2400	.2400
<b>VII. Hides, Leather, Boots and Shoes.</b>														
(a) Hides and tallow:														
Hides, No. 1 inspected steers and cows.....	Lb.	Toronto.....	.0922	.0943	.0841	.1033	.1133	.0927	.0731	.1239	.1104	.1196	.1237	.1329
Caliskins, green, No. 1.....	Each.	" .....	.0966	.0941	.0983	.1150	.1308	.1145	.1025	.1466	.1272	.1279	.1566	.1571
Horse hides, No. 1.....	Lb.	" .....	1.7500	1.7500	1.7500	1.7500	1.7500	1.7500	1.8520	1.9950	2.6250	3.0310	3.4170	3.6460
Tallow, rendered, No. 1 stock	Lb.	" .....	.0665	.0532	.0432	.0428	.0433	.0562	.0542	.0563	.0567	.0572	.0537	.0605
(b) Leather:														
Leather, No. 1 Spanish sole.....	"	" .....	.2908	.2950	.2950	.2912	.2900	.2895	.2800	.2800	.2800	.2808	.3145	.3650
" No. 1 slaughter sole, heavy.....	"	" .....	.3100	.3037	.2950	.3041	.3100	.3316	.2983	.3000	.3050	.3091	.3636	.4150
" harness, No. 1 U.O. (No. 1 R.).....	"	" .....	.3258	.3250	.3204	.3404	.3650	.3679	.3466	.3658	.3850	.3833	.3895	.3950
" heavy uppers.....	"	" .....	.4150	.4150	.4150	.4100	.4550	.4525	.4366	.4675	.4900	.4900	.5608	.6250
(c) Boots and Shoes:														
Boots, men's split Blucher	Pair.	Ottawa.....	1.1000	1.1000	1.0750	1.2000	1.2500	1.3500	1.4000	1.4000	1.3895	1.3250	1.3670	1.5830
bals, pegged medium wt.....	"	" .....	2.4000	2.4500	2.5000	2.5000	2.6000	2.6000	2.7000	2.7000	2.8450	2.9000	2.9920	3.2330
Boots, men's box calf, Blucher bals, Goodyear welt.....	"	" .....	1.4000	1.4000	1.5000	1.4500	1.5000	1.5000	1.5500	1.5500	1.6100	1.6500	1.7000	1.7920
Boots, women's Dongola Blucher bals, fair stitch.....	"	" .....	1.4000	1.4000	1.5000	1.4500	1.5000	1.5000	1.5500	1.5500	1.6100	1.6500	1.7000	1.7920
<b>VIII. Metals and Implements.</b>														
(a) Metals:														
Iron and steel:	*Ton.	Montreal.....	16.8333	18.4791	16.8541	16.9166	18.4583	21.1458	19.2083	18.5070	19.1250	19.9170	19.4370	21.1670
Pig iron, Fdry No. 1, N.S.	"	" .....	21.4683	23.0000	21.2083	19.9500	23.2750	25.2083	25.0016	20.6491	20.3750	20.0000	21.0000	23.0000
Summerlee No. 2	Cwt.	Toronto.....	2.0080	2.0120	1.7910	1.8540	2.1450	2.3000	2.0540	1.9500	2.0200	2.0500	2.0500	2.1290
Iron, common bar.....	Cwt.	" .....	2.9200	2.8000	2.4100	2.4000	2.4100	2.6300	2.5300	2.4500	2.4000	2.4200	2.4910	2.6500
" black, sheets, 18Gge.	"	" .....	4.0100	4.0000	3.7000	3.5500	3.8100	4.0300	3.3900	3.2800	3.6000	3.6000	3.6250	3.7830
" galvanized sheets 16-24, Queen's Head.....	"	" .....	4.0100	4.0000	3.7000	3.5500	3.8100	4.0300	3.3900	3.2800	3.6000	3.6000	3.6250	3.7830

\*Ton of 2,240 lbs.

	Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
VIII. Metals and Implements—Con.														
(3.) Metals—Continued.														
i. Iron and steel—Continued.														
Iron, tinplates, charcoal I.C.	Box of													
14 x 20 base, Bradley	112													
Grade.....	Sheets.	Toronto.	6-2700	6-3950	6-1250	5-9160	5-5830	5-2500	5-1250	5-0000	5-7080	6-9180	6-7500	
" tinplates, coke Besse-	"	"	4-4750	4-6080	4-1250	4-1250	3-4750	3-1020	2-9540	3-0750	2-9830	3-6950	4-4750	
mer, I.C., 14 x 20	"	"	3-2500	2-5540	2-4500	2-4500	2-4500	2-4500	2-4500	2-3750	2-0000	2-7290	3-0000	4-2910
" Boiler plates, $\frac{1}{4}$ in.	Cwt.	"	18-5000	17-8330	16-5830	16-0000	16-0000	16-0000	16-0000	16-0000	12-1000	13-7200	3-0000	2-4500
" Wrought, old material	Ton.	Montreal.	11-50	11-50	11-50	11-50	10-16	0-931	0-839	0-779	0-900	0-843	0-890	0-890
Steel, cast, black diamond	*Ton.	"												
" billets, mild	"	"												
ii. Other Metals, etc:														
Aluminum†	Lb.	New York.	†2-1666	1-1458	7083	7500	6266	5300	5250	3900	3675	3612	3500	3500
Antimony, Cookson's	Lb.	Toronto.	2-108	1-768	1448	1267	1042	1025	0-950	0-906	0-998	1-116	1-125	1-091
Brass, roll and sheet; 14-20	"	"												
Gauge.	Cwt.	Montreal.												
Copper, Lake Superior	"	"												
Casting Ingot.....	"	Toronto.	16-1040	14-7700	13-5620	12-8070	11-6350	11-0000	11-7910	11-3200	11-9400	17-6700	16-6100	16-8700
Lead, Domestic pig,	"	"												
(Trail)	"	"												
" imported pig.	"	"												
Mica††, size 1" x 1"	Lb.	Ottawa.	4-2500	4-0900	3-8000	3-8000	2-9300	2-8100	3-4000	3-5900	4-0900	4-4500	5-0800	4-4800
" " 1" x 2"	"	"												
" " 1" x 3"	"	"												
" " 2" x 3"	"	"												
††Mica, size, 9" x 4"	Lb.	Ottawa.							0-5000	0-5000	0-8000	0-5000	1-0000	0-8000
Mica, size 4" x 6"	"	"							1-0000	1-5000	1-8000	2-5000	2-2500	2-2500
Mica, size 6" x 8"	"	"							2-5000	3-0000	3-5000	4-0000	4-0000	4-0000
Mica, run of mines	"	"							5-0000	4-5000	5-0000	7-0000	9-0000	9-0000
Nickel	Ton.	"	160-0000	125-0000	150-0000	150-0000	175-0000	200-0000	60-0000	65000	75000	85000	1-00000	1-25000
Quicksilver, per 75 lb.	Flask.	New York.	7725	6753	5693	4850	4624	3719	3354	3468	3473	3517	5020	5500
Silver, bar fine	Oz.	"	51-4400	44-9580	38-4580	38-4580	34-8330	38-5830	37-3130	38-5210	40-5000	44-5420	51-0000	49-0460
Spelter, foreign	Cwt.	"	1-0533	9903	8755	7822	6404	6627	6819	6077	5905	6050	6206	5970
Solder, bar, half and half	Lb.	Toronto.	6-3760	5-9300	5-6900	5-2200	4-4300	4-2700	4-5200	4-7900	5-1800	7-2500	6-9000	5-9100



## WHOLESALE PRICES, CANADA, 1902-1913—Continued.

	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
VIII. Metals and Implements—Con.														
(a) Metals—Continued.														
i. Iron and steel—Continued.														
Iron, tinplates, charcoal, 1.	Box of 112	Toronto.	6-7500	6-7500	6-5000	6-5000	6-5000	6-5000	6-0410	6-0000	5-7500	6-6670	7-0000	7-0000
C. 14 x 20 base, Bradley	Sheets.	"	4-2500	3-9120	3-4250	3-4910	3-8330	4-2750	4-1200	4-0000	4-0000	4-2290	4-2700	4-5000
" tinplates, Coke Besse-	Cwt.	"	2-5500	2-5500	2-5500	2-5500	2-5500	2-4870	2-4500	2-2660	2-2000	2-2000	2-3250	2-5500
" Boiler plates, 1-1/2 in.	Ton.	Montreal.	.....	.....	10-9330	12-6360	13-0670	15-7500	11-5000	11-0000	12-0400	12-5000	12-5000	9-9170
Steel, wrought, old material														
Steel, Cast, Black Dia-														
mond	Lb.	"	0-0800	0-0800	0-0795	0-0775	0-0775	0-0775	0-0775	0-0760	0-0750	0-0750	0-0750	0-0750
" Billets, mild.	*Ton.	"	23-3125	23-1250	21-1686	24-2916	27-1458	33-9375	29-1458	26-2916	25-9100	25-7080	24-3900	28-5000
ii. Other metals, etc.														
Aluminum.	Lb.	New York.	3-5000	3-5000	3-5000	3-5000	3-5000	3-3833	3-3191	2-2822	2-2270	2-0409	2-1965	2-401
Antimony, Cookson's.	Lb.	Toronto.	0-9668	0-8835	0-0775	0-1175	0-2344	0-2087	0-0989	0-0870	0-0800	0-0818	0-0870	1-079
Brass, roll and sheet, 14-														
20 gauge.	Cwt.	Montreal.	12-1500	13-7525	13-2525	16-1070	19-9110	21-3170	13-3090	13-3530	13-3900	13-6580	17-2500	17-1800
Copper, Lake Superior														
Casting Ingot.	"	Toronto.	12-0100	13-6800	13-8430	16-6850	21-2290	23-3300	14-1458	14-3540	13-9200	13-2790	17-7290	16-8100A
Lead, domestic pig.	"	"	3-5600	3-4700	3-3400	3-8400	4-7200	5-4200	3-8900	3-6900	3-7300	3-8800	5-1700	5-2960
(Trail)	"													
" imported pig.	"													
Mica††, size, 1" x 1"	Lb.	Ottawa.	0-0400	0-0450	0-0500	0-0600	0-1200	0-1500	0-1000	0-1000	0-1000	0-1000	0-1000	0-1100
" " 1" x 2"	"	"	0-1250	0-1500	0-1500	0-1800	0-1800	0-2500	0-2000	0-2000	0-2000	0-1900	0-1900	0-1900
" " 1" x 3"	"	"	0-2300	0-3500	0-2000	0-3500	0-4000	0-5000	0-3500	0-4000	0-4250	0-4250	0-4250	0-4250
" " 2" x 3"	"	"	0-4500	0-5000	0-5000	0-6000	0-6000	0-7000	0-6000	0-7000	0-6250	0-6250	0-6250	0-6250
††Mica, size, 2" x 4"	Lb.	Ottawa.	0-6000	0-7000	0-7000	0-7500	0-7500	0-9000	0-8000	0-8000	0-8000	0-8000	0-8000	0-8000
Mica, size 3" x 5"	"	"	0-9000	0-9000	0-9000	1-0000	1-0000	1-0000	1-0000	1-0000	1-0000	1-0000	1-0000	1-1000
Mica, size 4" x 6"	"	"	1-2500	1-2500	1-1000	1-2500	1-2500	1-3000	1-1250	1-2500	1-250	1-2500	1-2500	1-2500
Mica, size 5" x 8"	"	"	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Mica, run of mines.	Ton.	"	5020	4000	4350	4390	4300	4250	4580	4300	4400	4250	4163	4045
Nickel.		New York.	48-0830	47-3330	43-4090	39-6250	41-3540	41-4580	44-6670	46-0000	47-1500	46-0000	42-3130	39-5630
Quicksilver, per 75 lb.	Flask.	"	5281	5420	5884	6100	6738	6598	5349	5216	5331	5332	6083	5979
Silver, bar fine.	Oz.	"	5-6000	6-1100	6-0500	6-9400	7-2900	6-9000	5-2000	5-6750	5-9160	6-2920	7-2500	7-0380
Spelter, foreign.	Cwt.	Toronto.	1-960	1-1879	1-1879	2-2438	2-2438	2-2625	1-925	1-900	1-996	2-446	2-2762	2-2873
Solder, bar half and half	Lb.	"	31-1600	31-9700	30-5400	34-4100	42-6800	43-3300	32-2200	32-1600	36-0000	45-1500	49-3330	48-8330
Tin, ingots, straits.	Cwt.	"	6-1250	6-6700	6-6100	7-1250	7-9200	7-8750	6-8000	6-3960	6-7500	7-5420	8-0000	8-0000
Zinc sheets, in 5 cwt.	"	"	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

\*Ton of 2240 lbs. †In 1886 Aluminum was \$12.00 per pound and was quoted among the rarer metals from 1890-1894.

††Until 1896 Amber Mica was not graded but sold "Run of mines," all sizes from 2 x 3 up to 5 x 8. Smaller sizes were discarded until 1899 and 1901, when methods for utilizing them in electrical machinery were devised.



Unit.	Market..	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>VIII. Metals and Implements—Con.</b>													
(b) Implements:													
Lb.	Toronto.....	1075	1075	1075	1075	1075	1075	1075	1075	1075	1000	1000	1078
Anvils, Peter Wright's, 80-lb.	"	7-7500	8-3540	8-5000	8-5000	8-5830	9-5000	9-5000	9-5000	7-5000	7-5000	7-8210	8-1250
Axes, standard single bit.....	Montreal.....	25-0000	3-9190	3-7380	3-2500	3-2880	3-4600	3-5250	3-3940	3-3500	3-3920	3-2540	3-4500
Chains, coil, 7-in.....	Toronto.....	3-5500	25-0000	25-0000	25-0000	24-7500	21-6600	21-0000	21-0000	21-0000	22-0000	22-0000	25-0000
Grindstones, 40 to 200 lb.....	"	2-5000	3-6540	3-7870	3-8000	3-8000	3-7000	3-6160	3-5000	3-7500	4-0500	4-1500	4-1500
Horseshoes, No. 1 medium.....	"	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-2100	1-9500	1-9500	1-9500	1-9500
Mallets, carpenters' hickory, round 6 in.....	"	3-6250	3-6250	3-6250	3-6250	3-6250	3-6250	3-2680	4-5620	5-0000	5-0000	5-0000	5-0000
Scraws, bench, wood.....	"	0800	0800	0800	0779	0775	0775	0768	0775	0600	0600	0600	0600
Sledge hammers.....	Toronto.....	3700	3700	3700	3700	3700	4302	3964	2850	2800	2800	2800	2800
Soldering irons, base.....	"	1350	1350	1350	1350	1350	1350	1350	1350	1350	1256	1256	1254
Vises, Peter Wright's.....	"	1350	1350	1350	1350	1350	1350	1350	1350	1350	1256	1256	1254
<b>IX. Fuel and Lighting</b>													
Coal, Bituminous, N. S., run of mines.....	Montreal.....	3-5150	3-5830	3-5150	3-2150	3-2150	3-4250	3-6910	3-6020	3-5400	3-5320	3-5320	3-5320
Coal, Toronto, Bituminous Steam	Toronto.....	4-9790	5-8100	4-9300	4-5000	4-5000	4-5000	4-5000	4-5000	6-0600	5-5000	5-2500	5-2500
Coal, Bit. B.C., Mountain Dist't.....	"	1-8330	1-9300	1-9480	1-9810	2-0150	2-1125	2-1158	2-2080	2-0800	2-3800	2-7500	2-7500
Coal, Bituminous, Vancouver Isl. * * *	"	2-9100	3-0200	2-9100	2-9600	3-5700	3-8700	3-7400	3-9100	3-9000	3-8960	4-1800	4-1640
All grades, clean.....	"	2-9100	3-0200	2-9100	2-9600	3-5700	3-8700	3-7400	3-9100	3-9000	3-8960	4-1800	4-1640
Lump.....	"	2-5000	2-7500	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000
Pea.....	"	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000	2-5000
Coal, Bituminous, Victoria.....	Victoria.....	6-0000	6-2083	6-5000	6-5000	6-5000	7-5000	7-5000	7-5000	7-5000	7-5000	7-5000	7-5000
Coal, Anthracite.....	Montreal.....	5-7240	5-9410	5-8080	5-7750	5-7330	5-7660	5-7660	5-6830	6-1250	6-3625	6-7420	7-6250
Coke, Furnace, Connellsville.....	"	4-0658	2-9125	1-6375	2-2875	2-6750	2-8250	1-7083	2-0021	1-5130	1-5130	1-5130	1-5130
Coke, B. C. Mountain District.....	"	4-0658	4-4390	4-3241	4-3227	4-3227	4-3575	4-3325	4-4550	4-4550	4-8000	5-0000	5-0000
Gasoline.....	Toronto.....	2100	2300	1750	1900	2150	1900	1700	1700	1750	1650	2008	2500
Coal Oil, Prime White Canadian.....	"	1608	1850	1908	1625	1595	1500	1504	1550	1316	1221	1358	1533
Coal Oil Water White American.....	"	1727	1933	1987	1745	1700	1683	1541	1550	1504	1371	1545	1583
Calcium Carbide.....	Works.....	65-0000	65-0000	65-0000	65-0000	65-0000	65-0000	65-0000	65-0000	62-0800	62-0800	65-0000	65-0000
Marbles, Eddy's Telegraph.....	Montreal.....	4-2000	4-2000	4-4250	4-5000	4-6200	4-7750	4-9000	4-7500	4-7800	4-8000	4-8000	4-8000
<b>X. Buildings Materials.</b>													
(a) Lumber:													
Spruce Deals, N.B., merchantable, 3 x 7, 3 x 9, 3 x 11 up.....	St. John, N.B.	12-7833	13-6666	12-2016	13-6458	14-8958	14-5625	14-8125	15-2083	15-3000	14-2710	14-4590	16-1460
N. B. Shingles, Extra.....	"	2-6291	2-7208	2-5750	2-4958	2-5791	3-0660	3-2583	2-8333	2-7000	2-5410	2-8385	3-2375
N. B. Shingles, Clear.....	"	2-1291	2-2208	2-0750	1-9958	2-0791	2-5650	2-7583	2-4333	2-2000	2-1160	2-3988	3-6750

\*Ton of 2240 lbs.

\*\*Estimated by a dealer.





Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>X. Building Materials—Continued.</b>													
<b>(a) Lumber—Continued.</b>													
Pine Lumber, all grades.....	M ft.	16-5000	17-0000	17-0000	17-5000	18-5000	21-5000	20-5000	20-5000	20-5000	20-0000	20-5000	20-7500
B. C. Lumber, average of cut	"	10-0000	15-2700	15-3000	14-9500	14-9500	16-2500	17-0000	14-2000	15-2000	21-5000	21-5000	21-5000
B. C. Fir, 2 x 4 and up.....	M	.....	.....	.....	.....	.....	.....	.....	3-1000	2-5250	2-7670	2-9160	3-0000
B. C. Shingles, Cedar.....	M ft.	35-2900	40-6600	42-1600	40-6600	41-7500	42-0000	42-0000	43-2000	50-0300	55-0000	54-5000	54-0000
Pine, Good Siding, 1 x 7 and up.	"	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Pine, Shipping Culls, Siding 1½ in. and 2 in.....	"	15-9580	17-2500	18-2500	18-3125	21-2910	25-8750	26-5000	25-0416	30-6800	30-0000	28-4160	30-8330
Pine Box Boards.....	M	13-2500	13-2500	13-2500	13-3750	15-5410	21-0830	21-2500	17-5000	13-4300	13-5000	13-7080	16-9170
Laths, No. 1 White Pine, 1½ in.	M ft.	2-9795	2-8750	2-5620	2-5200	4-1040	4-2500	3-7180	3-4080	3-8800	4-0000	3-9060	3-9750
Hemlock, 1 inch.....	"	.....	.....	.....	.....	13-2500	14-4165	14-7500	13-7500	12-2500	11-0000	11-0000	17-5000
Pine, No. 1 cuts and better, 1 in.	"	34-8750	45-0000	46-4160	48-6660	50-0830	50-0000	46-0830	43-4160	49-0000	60-8300	62-5000	57-0830
Oak, Red plain, Firsts and Seconds, 1 inch.....	"	32-0000	32-2500	38-5400	45-1250	48-0000	48-3300	50-1660	50-0000	53-1600	54-0000	53-6660	59-3900
Birch, common and better, 1 in.	"	19-0000	19-4583	22-7916	22-5416	24-6660	24-5000	24-4160	24-2083	26-5000	29-0000	29-6660	32-3330
Maple, soft, common and better.	"	19-0000	20-0000	22-8330	21-2500	22-0833	22-1660	21-5000	21-1040	20-0000	25-0000	25-0000	33-0000
Spruce, 1 in. x 4 in. and up.	"	.....	.....	.....	.....	.....	.....	.....	.....	15-4800	15-2500	14-9370	17-3330
<b>(b) Miscellaneous.</b>													
Bricks, common building.....	M	8-0000	9-0000	10-0000	10-5000	10-5000	10-5000	10-5000	10-5000	10-5000	10-5000	11-0000	11-7500
Bricks, common building.....	"	7-3750	7-3750	10-0000	12-2500	11-6250	11-5000	11-9500	12-0000	12-5000	10-5000	10-0000	19-0000
Bricks, fire.....	Brl.	19-0000	19-0000	18-6250	18-5000	18-6660	19-0000	19-0000	19-0000	19-0000	19-0000	19-0000	19-0000
Cement, Canadian Portland.....	Brl.	2-5750	2-4750	2-0350	1-8680	1-9830	2-0560	2-0875	1-7000	1-6200	11-6500	1-4970	1-5080
Lime, high calcite, 98-97%.....	Bus.	2-2200	2-2200	2-2200	2-2200	2-2300	2-2300	2-2300	2-2400	2-2400	2-2400	2-2400	2-2800
Plaster of Paris.....	Brl.	1-9000	1-9000	1-9000	2-0000	2-0000	2-1000	2-0000	2-0000	2-0000	2-0250	2-1000	2-1000
Building paper, tarred fibre No. 1.....	Roll	.....	.....	6500	6500	6500	6500	6000	5500	5500	5500	5500	6200
Building paper, plain fibre No. 1.....	"	.....	.....	5500	5500	5500	5500	5000	4500	4500	4500	4500	5000
Building paper, tarred for Roofing.....	"	4500	5000	5000	5000	4800	4800	4000	4000	4000	4000	4000	4300
Building paper, plain.....	"	3500	4000	4000	4000	3700	4500	3400	3000	3000	3000	3000	3500
Pitch, roofing (Sydney).....	Cwt.	8500	1-0291	1-0583	8875	8500	8500	7470	7000	7000	7000	7125	8500
Tar, crude coal (pure).....	Brl.	4-0000	4-0000	4-0000	4-0000	4-0000	4-0000	3-5400	3-5000	3-5000	3-5000	3-5830	4-5000
Soil pipe, 4 in. medium.....	Ft.	1800	2100	2100	2100	2100	2050	2050	2050	1851	1711	1862	2375
Iron pipe, black, 1 in.....	100 Ft.	4,8250	4-8000	4-3890	4-3500	5-2350	4-9850	5-3000	4-5500	4-4000	4-4000	4-1850	4-7030

\*Montreal.

## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>X. Building materials—Continued.</b>													
(b) Miscellaneous—Continued.													
Lead pipe.....		4-4580	4-7920	5-5000	5-5000	5-3330	5-1670	5-0000	5-0190	5-1570	5-9230	5-9350	5-2500
Red lead dry in 560 lb. casks.		4-8330	4-8650	4-4520	4-3540	4-1670	4-0420	4-1250	4-1720	4-3125	4-5680	5-2500	5-2730
Nails, cut, 8-9d.....		2-7250	2-3950	2-6410	2-8000	2-4980	2-7040	3-0870	2-1290	2-4580	2-7790	3-3120	3-0830
Nails, wire base.....		2-7500	2-7500	2-1666	1-7500	1-7083	1-4895	1-4375	2-0093	1-8666	2-5521	3-1479	2-7937
Sash weights.....		3-600	3-600	3-600	3-600	3-600	3-600	3-600	3-600	3-516	3-500	3-500	2-7916
Sash cord No. 8, No. 1 N.....		0-527	0-493	0-487	0-507	0-441	0-419	0-425	0-425	0-464	0-464	0-550	0-2650
Hinges, heavy 8 in.....		18-7500	16-5000	14-3600	13-5000	11-5600	12-3800	13-5600	13-7500	13-7500	18-2500	18-0000	18-1500
Wire, copper.....		2-7380	2-6540	2-6000	2-6000	2-6000	2-6000	2-6000	2-6000	2-6000	2-7500	3-1670	2-8000
Wire, iron, No. 7, (base 6-9).....		2-3000	2-0875	1-9500	1-8830	1-8729	1-8645	1-5333	1-3750	1-2125	1-5080	1-9580	1-3625
Wire cloth, painted screen.....		5-5410	4-8430	4-6770	4-6250	3-7910	3-1140	3-0140	2-5160	1-8680	2-9720	3-3380	3-0580
Wire fencing, galvanized barb.....		5-9360	5-6140	5-2700	4-5360	4-0420	4-0870	4-5100	5-4530	5-6663	6-0930	6-7810	6-3640
(c) Paints, Oils and Glass:		6-745	6-304	5-779	6-058	5-753	6-154	5-241	4-316	4-766	5-479	7-750	7-727
White lead, pure, ground in oil		6-904	6-595	6-595	6-354	6-050	5-970	5-445	4-625	5-062	5-750	8-079	8-209
Linseed oil, raw.....		6-233	5-887	5-187	4-962	4-737	4-227	4-231	4-491	4-866	6-808	7-116	5-500
Linseed oil, boiled.....		1-450	1-375	1-383	1-406	1-450	1-502	1-537	1-412	1-350	1-631	2-554	2-104
Turpentine.....		1-7500	1-7250	1-7000	1-7620	1-8500	1-8500	1-8500	1-8500	1-8500	1-8500	1-7930	1-7930
Benzine, Canadian.....		1-704	1-637	1-441	1-410	1-425	1-702	1-641	1-520	1-770	1-462	1-987	1-660
Venetian red, dry (in brl.).....		2-8540	2-8660	2-8830	2-8000	2-7000	2-7000	2-8500	4-0000	4-2000	4-2000	4-2000	4-2000
Paris green, Eng. and Can.....		1-1060	1-0750	1-0950	1-1660	1-0330	1-0060	1-0580	1-0000	1-0000	1-0660	1-1750	1-2450
Rosin, white, in 280 lb. lots		2-2000	2-1000	2-0900	2-0210	2-0000	2-0520	2-1100	2-0000	2-0000	2-0000	2-0910	2-0790
Prepared paint first quality		7-000	7-000	7-000	6-750	6-900	6-900	6-600	6-530	6-500	5-510	8-625	8-950
"Pure" in tins.....		1-267	1-200	1-229	1-250	1-250	1-200	1-250	1-250	1-250	1-366	1-400	1-400
Shellac, pure orange (in brl.).....		4-1370	3-1700	2-6750	2-6660	2-3160	2-1830	2-3750	2-3200	2-9660	3-7290	4-0870	4-1200
Varnish, No. 1 furniture (in brl.).....		2-1250	2-1250	2-1250	2-1250	1-9960	1-8750	1-9020	1-9620	1-8700	1-9500	2-1250	2-1500
Glue, domestic broken sheet		2-4000	2-4000	2-4000	2-4000	2-5200	2-5200	2-5200	2-6400	2-6400	2-6400	2-6400	2-6400
Glass, window, "Star," under 26 in. (first break).....		12-0000	12-0000	12-0000	12-0000	12-0000	13-2000	13-2000	15-0000	15-0000	15-0000	16-8000	16-8000
Putty ordinary (in drums).....		2-4000	2-4000	2-4000	2-4000	2-5200	2-5200	2-5200	2-6400	2-6400	2-6400	2-6400	2-6400
<b>XI. House Furnishings:</b>													
(a) Furniture:													
Chairs, kitchen, common spindle.....		2-4000	2-4000	2-4000	2-4000	2-5200	2-5200	2-5200	2-6400	2-6400	2-6400	2-6400	2-6400
Tables, kitchen, 4 ft. with drawer.....		12-0000	12-0000	12-0000	12-0000	12-0000	13-2000	13-2000	15-0000	15-0000	15-0000	16-8000	16-8000



## WHOLESALE PRICES, CANADA, 1890-1901—Continued.

Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

	Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>XI. House Furnishings—Continued.</b>														
(a) Furniture—Continued.														
Tables, hardwood, extension.	Each.	Ottawa.....	5.0000	5.0000	5.0000	5.5000	5.5000	5.5000	6.0000	6.0000	6.0000	6.0000	7.0000	7.0000
Sideboards, hardwood, with bevelled mirror, 16" x 28".	Each.	"	7.0000	7.0000	7.5000	7.5000	7.5000	7.7500	7.7500	8.2500	8.2500	9.0000	9.0000	9.0000
Bedroom suite, hardwood, two-piece dresser with mirror, 18" x 36", and washstand	Set.	"	11.0000	11.0000	11.5000	11.5000	12.0000	12.0000	12.0000	13.0000	13.0000	14.0000	14.0000	14.0000
Iron beds, continuous pillar, 4' wide, No. 504.	Each.	Waterville, Q.	6.5100	6.5100	6.0800	6.0800	6.0800	4.1200	4.1200	4.1200	4.0100	4.0100	5.9400	4.8100
(b) Crockery and Glassware:														
Glassware, tank glass tumblers, ( $\frac{3}{4}$ pint).	Doz.	Ottawa.....	.2500	.2500	.2400	.2400	.2400	.2400	.2400	.2400	.2300	.2200	.2500	.2500
Earthenware, printed toilet sets, 10 pieces.	Each.	"	1.5000	1.5000	1.5000	1.4000	1.4000	1.3500	1.3000	1.3000	1.3500	1.3500	1.3000	1.3000
Earthenware, white, cups and saucers.	Doz.	"	.4400	.4400	.4400	.4300	.4200	.4000	.4000	.4200	.4400	.4400	.4400	.4400
Earthenware, printed dinner sets, 97 pieces.	Pars.	"	4.1500	4.1500	4.1000	4.1000	4.1000	4.1000	4.0000	4.0000	3.9500	3.9500	3.9500	3.9500
(c) Table Cutlery:														
Table Knives, celluloid handles, medium size.	Each.	"	1.3500	1.3500	1.3500	1.3500	1.3500	1.3500	1.3500	1.3500	1.3500	1.3500	1.2200	1.2200
Silver Plated Ware, 6 dwt., medium knives and forks.	Doz.	"	2.2500	2.2500	2.2500	2.2500	2.2500	2.2500	2.1500	2.1500	2.1500	2.1500	2.1500	2.1500
(d) Kitchen Furnishings:														
Pails, wooden, 3 hoop.	Doz.	Toronto.....	1.8660	1.9000	1.9000	1.9000	1.8330	1.6620	1.6200	1.6000	1.6000	1.7040	2.0500	2.0500
Tubs, wooden, No. 0.	"	Montreal.....	9.2500	9.5000	9.5000	9.5000	9.1660	8.5410	8.2500	8.0000	8.0000	8.5830	10.6250	9.4160
Brooms, 4 string.	"	Toronto.....	2.9000	3.2000	3.2000	3.3900	3.4500	3.4500	3.4500	3.4500	3.3900	3.3900	4.3000	4.1000
<b>XII. Drugs and Chemicals.</b>														
Alcohol, 65 O. P.	Gal.	Toronto.....	3.3440	3.6650	3.8310	3.8500	3.8500	4.0360	4.1700	4.4010	4.5200	4.5200	4.5200	4.5200
Methylated Spirits.	"	"	1.18-	1.18-	1.18-	1.08-	1.08-	1.08-	1.08-	1.08-	1.08-	1.08-	1.08-	1.08-
" Grade No. 1 standard.	"	Ottawa.....	1.20	1.20	1.20	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10
" Grade No. 2 special.	"	"	1.6000	1.6000	1.6000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
" No. 2 Special.	"	"	1.6000	1.6000	1.6000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000	1.5000
Alum, lump.	Cwt.	Montreal.....	1.6750	1.8250	1.8020	1.7080	1.8750	1.812	1.7500	1.7500	1.5250	1.4500	1.4500	1.4570
Bleaching Powder.	"	"	2.0880	2.3560	2.5100	2.7700	2.7080	2.6250	2.5100	2.3500	2.2630	2.1870	3.0730	2.5790
Borax Powder.	Lb.	Toronto.....	.1300	.1250	.1090	.1100	.1100	.0830	.0700	.0700	.0520	.0520	.0520	.0500



	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>XI. House Furnishings—Continued.</b>														
(a) Furniture—Continued.														
Table, hardwood, extension.	Each.	Ottawa	8-0000	8-0000	8-0000	8-0000	8-0000	8-0000	8-0000	8-0000	8-0000	8-0000	8-2500	8-3330
Sideboards, hardwood, with bevelled mirror, 16" x 28".	Each.	"	10-0000	10-0000	10-0000	10-0000	10-0000	10-5000	10-5000	10-5000	10-5000	10-5000	11-0000	11-9170
Bedroom suite, hardwood, two-piece dresser with mirror, 18" x 36", and washstand.	Set.	"	14-0000	15-0000	15-0000	15-0000	15-0000	15-0000	15-0000	15-0000	15-0000	15-0000	15-0000	16-6250
Iron beds, continuous pillar, 4' wide, No. 504.	Each.	Wauville, Que.	4-4500	3-9900	3-5000	3-5000	3-5000	3-8500	3-5000	3-5000	3-5000	3-5000	3-5000	3-6500
(b) Crockery and Glassware:														
Glassware, tank glass tumbler, (3 pint).	Doz.	Ottawa.	.2500	2-500	.2300	.2200	.2200	.2200	.2400	.1900	.2100	.2100	.2100	.2100
Earthenware, printed toilet sets, 10 pieces.	Each	"	1-3500	1-3500	1-3000	1-1800	1-2800	1-3300	1-3500	1-2700	1-3500	1-3500	1-4400	1-8556
Earthenware, white, cups and saucers.	Doz.	"	.4400	.4400	.4400	.4500	.4900	.5100	.5200	.5100	.5100	.5100	.5429	.7291
Earthenware, printed dinner sets, 97 pieces.	Each.	"	3-9500	3-9600	3-9000	3-9000	3-8000	3-8500	4-0000	3-7500	3-7500	3-7500	3-9630	5-3080
(c) Table Cutlery:														
Table Knives, celluloid handles, medium size.	Doz.	Ottawa.	1-2200	1-2200	1-2500	1-2500	1-2500	1-3500	1-2000	1-0500	1-0500	1-0500	1-0960	1-1000
Silver Plated Ware, 6 dwt., medium knives and forks.	Doz.	"	2-1500	2-1500	2-1500	2-1500	2-1500	1-4000	1-4000	1-4000	1-4000	1-4000	1-4000	1-4000
(d) Kitchen Furnishings:														
Pails, wooden, 3 hoop.	Doz.	Toronto.	1-7160	1-7500	1-9500	2-0000	2-0500	2-0500	2-0500	2-0500	2-0500	2-0500	2-0500	2-1500
Tubs, wooden, No. 0.	"	Montreal.	9-1875	9-5000	11-3750	11-5000	10-7500	10-7910	11-0000	10-8330	10-5000	10-5000	10-5000	10-5000
Brooms, 4 string.	"	Toronto.	4-1000	4-1000	4-4000	4-1800	3-9700	3-7400	3-8300	4-2300	4-6800	4-3710	4-6800	4-4630
<b>XIII. Drugs and Chemicals:</b>														
Alcohol, 65 O. P.	Gal.	Toronto.	4-5200	4-5200	4-5200	4-5200	4-5200	4-5200	4-6700	5-0000	4-5400	4-6000	4-7250	4-7250
Methylated Spirits.	"	Ottawa.	1-08	1-08	1-08	1-08	.88	.68	.68	.70	.63	.63	.63	.63
Grade No. 1 standard.	"	"	1-10	1-10	1-10	1-10	.90	.70	.70	.58	.53	.65	.65	.65
" Grade No. 1 special.	"	"							.58	.60	.55	.5500	.55	.55
" Grade No. 2 standard.	"	"							.60	.60	.55	.5500	.55	.55
" Grade No. 2 Special.	"	"							.60	.60	.55	.5500	.55	.55
Alum, lump.	Cwt.	Montreal.	1-5750	1-5750	1-5750	1-5750	1-5750	1-5750	1-5750	1-5750	1-5750	1-5750	1-6250	1-6250
Bleaching Powder.	"	"	2-2930	2-1250	2-0930	2-0000	2-0000	2-0000	1-9790	1-9500	1-9500	1-9500	1-9500	1-9500
Borax Powder.	Lb.	Toronto.	.0500	.0520	.0600	.0600	.0600	.0600	.0680	.0600	.0600	.0800	.0758	.0750

WHOLESALE PRICES, CANADA, 1890-1901—Continued.  
Average annual prices based on records of monthly and weekly prices as published by the Department of Labour, Canada—Continued.

	Unit.	Market.	1890.	1891.	1892.	1893.	1894.	1895.	1896.	1897.	1898.	1899.	1900.	1901.
<b>XII. Drugs and Chemicals. Con.</b>														
Brimstone.....	Cwt.	Montreal.....	2-2500	2-3430	2-4060	2-2290	2-0000	2-0000	2-0000	2-0000	2-3330	2-2700	2-2500	2-2500
Caustic Soda, 60 degrees.....	"	"	2-3600	2-4620	2-6000	2-5450	2-3430	2-0750	2-0750	1-9910	2-0080	1-9310	2-3500	2-3850
Copperas.....	"	"	8-500	1-3950	9-370	8-750	8-750	8-750	8-750	8-250	7-580	7-750	7-750	7-750
Glycerine.....	Lb.	"	2-370	2-114	1-940	1-830	1-840	1-840	2-660	2-360	2-150	1-900	1-850	1-760
Muriatic Acid, commercial.....	"	Toronto.....	0-325	0-325	0-325	0-325	0-325	0-325	0-325	0-325	0-325	0-325	0-325	0-325
Opium, crude.....	"	Montreal.....	4-5720	4-2280	3-8750	3-8750	4-2500	4-5830	4-1250	4-1870	4-5830	4-5000	0-4000	0-4000
Quinine, Howard's.....	Oz.	Toronto.....	4-860	4-000	3-670	3-570	3-700	4-000	3-720	3-080	3-570	3-200	4-3750	4-2500
Soda Ash.....	Cwt.	Montreal.....	1-8040	2-0250	2-0250	1-7750	1-7500	1-7500	1-7500	1-7500	1-7500	1-4320	1-4120	1-3750
Sulphuric Acid (com.).....	Lb.	Toronto.....	0-250	0-250	0-250	0-250	0-250	0-250	0-250	0-208	0-208	0-208	0-208	0-208
Carbolic Acid Crystal.....	"	"	5-160	2-820	2-750	3-440	2-730	2-300	2-500	2-500	2-500	2-380	3-850	3-850
Indigo, natural.....	"	Montreal.....	9-377	1-1000	1-0392	1-3433	1-2622	1-1811	1-2420	1-0392	8-872	7-756	8-577	7-756
<b>XIII. Miscellaneous.</b>														
<b>(a) Furs:</b>														
Mink, dark.....	Per skin	Montreal.....	9-330	1-6870	1-5000	1-8700	1-5410	1-0000	1-1660	1-5000	1-7700	2-1870	3-1250	3-0000
Muskrat, best winter and fall.....	"	"	1-766	1-491	1-300	1-725	1-441	0-800	0-866	1-041	1-458	1-000	1-000	1-000
Raccoon (chat sauvage.).....	"	"	6-500	5-910	6-000	9-000	9-450	9-500	7-620	7-500	1-000	1-000	1-2500	1-2500
Skunk, black, Canadian.....	"	"	6-790	9-870	1-2500	1-2500	1-2290	1-0000	8-300	7-870	9-000	1-0000	1-4830	1-3120
<b>(b) Liquors and Tobacco:</b>														
Hops, Canadian.....	Lb.	Montreal.....	1-630	2-490	2-090	1-990	1-650	0-720	0-720	1-320	1-470	1-660	3-300	1-975
Malt, Choicest Bohemian.....	Bu.	Toronto.....	7-500	7-300	7-500	7-400	7-200	7-400	7-000	7-400	7-200	7-000	7-300	7-300
Whiskey, Canadian Club.....	"	Walkerville.....												
20-8 u.p. Draught Ale and Porter.....	Gal.	Ottawa.....	1-7000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000	1-9000
Tobacco, smoking, standard brand plug.....	Brl.	"	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500	6-6500
Tobacco, raw leaf, Ontario burley.....	Lb.	Hamilton.....	5-100	5-600	5-600	5-600	5-600	5-600	5-600	6-650	6-833	6-600	6-600	6-600
Sundries:	"	Leamington.....	0-550	0-500	0-600	0-575	0-500	0-500	0-675	1-100	0-575	0-650	0-585	0-750
Paper, newsprint.....	Cwt.	Delivered.....	3-7000	3-5000	3-5000	3-3750	3-2500	3-0000	2-7500	2-6500	2-3000	2-0300	2-4250	2-4250
Pulp, Ground wood Mechanical.....	Ton	"			15-0000		12-0000		*8-5000					
Sulphite, Unbleached.....	"	"												
Paper, wrapping, No. 1.....	Lb.	"												
Binder, twine, sisal.....	"	Toronto.....	1-225	1-011	1-006	1-002	0-772	0-651	0-681	0-647	0-967	1-116	1-104	1-046
Rope, pure manilla No. 1.....	"	"	1-475	1-373	1-195	1-114	0-984	0-904	0-889	0-800	1-109	1-237	1-481	1-438
Gunpowder, common sporting, 25 lb.....	Keg.	Montreal.....	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000
Rubber, Para Isl., fine.....	Lb.	New York.....	8-376	7-003	6-763	7-167	6-744	7-425	8-000	8-454	9-954	9-954	9-954	9-954
Soap, common.....	Box	Montreal.....	2-2310	2-3410	2-3500	2-3500	2-3500	2-3500	2-3160	2-3000	2-3000	2-3000	2-4250	2-5750
Shampoo, Canada Laundry.....	Lb.	Toronto.....	0-462	0-469	0-397	0-447	0-460	0-450	0-450	0-441	0-439	0-437	0-425	0-462

## WHOLESALE PRICES, CANADA, 1902-1913—Continued.

	Unit.	Market.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>XII. Drugs and Chemicals. — Con.</b>														
Brimstone.....	Cwt.	Montreal.....	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500	2-2500
Caustic Soda, 60 degrees.....	"	"	2-4700	2-5000	2-5000	2-3750	2-3750	2-3750	2-3750	2-3750	2-3750	2-3750	2-3750	2-3750
Copperas.....	"	"	7750	7750	7750	7750	7750	7750	7750	7750	7750	7750	7750	7750
Glycerine.....	Lb.	Toronto.....	1980	1850	1700	1650	1700	1700	1770	2060	2500	2500	2500	2500
Muriatic Acid, commercial.....	"	Montreal.....	0481	0600	0591	0500	0500	0500	0500	0400	0550	0575	0600	0600
Opium, crude.....	Lb.	Montreal.....	3-8540	3-8540	4-0000	3-9370	4-2500	5-8330	5-6640	6-0410	6-2500	6-4000	8-2000	7-9170
Quinine, Howard's.....	Oz.	Toronto.....	4310	4130	3880	3630	3400	3400	3400	2300	2300	2000	2000	3741
Soda Ash.....	Cwt	Montreal.....	1-3750	1-9680	2-0000	2-0000	2-0000	2-0000	2-0000	2-0000	2-0000	2-0000	2-0000	2-0000
Sulphuric Acid, commercial.....	Lb.	Toronto.....	0200	0200	0280	0300	0300	0300	0300	0300	0300	0300	0300	0300
Carbolic Acid, crystal.....	"	"	4500	4500	5250	5000	5000	5000	5000	4500	4160	3208	3250	3830
Indigo, natural.....	"	Montreal.....	6742	6944	5120	5322	6539	7958	7958	6539	6944	6944	5728	5222
<b>XIII. Miscellaneous.</b>														
<b>(a) Furs.</b>														
Mink, dark.....	per skin	Montreal.....	3-3540	4-0000	3-9580	5-6660	6-6660	7-6660	6-5830	6-0000	5-9853	5-1875	5-2710	5-2710
Muskrat, best winter and fall.....	"	"	1000	1366	1483	1258	1525	2058	2666	2733	2708	2817	3583	3241
Raccoon (chat sauvage).....	"	"	1-2500	1-2500	1-2708	1-8083	1-6916	1-3416	1-3500	1-3500	1-2917	1-7667	2-5410	2-5000
Skunk, black, Canadian.....	"	"	1-2500	1-4580	1-5000	1-7080	1-4660	1-2500	1-1870	1-3330	1-7250	1-4541	2-4580	3-1888
<b>(b) Liquors and Tobacco:</b>														
Hops, Canadian.....	Lb.	Montreal.....	2900	4120	5230	5000	3150	2720	2240	5400	4780	3055	3712	2383
Malt, Choicest Bohemian.....	Bu.	Toronto.....	7200	7200	7400	7500	7500	1-1000	9000	9000	9000	9925	1-1830	9175
Whiskey, Canadian Club, 20-8 u.p.....	Gal.	Ont.....	1-9000	1-9000	1-9000	1-9000	1-9000	2-3000	2-3000	2-3000	2-3000	2-3000	2-3000	2-3000
Draught Ale and Porter.....	Brl.	Ottawa.....	6-6500	7-2000	7-2000	7-2000	7-2000	7-2000	6-8000	6-8000	6-8000	6-4330	6-2500	6-2500
Tobacco, smoking, standard brand plug.....	Lb.	Hamilton.....	6766	7075	7100	7100	7100	7100	7308	7183	7100	7100	7100	7100
Tobacco, raw leaf, Ontario Burley.....	"	Leamington.....	0950	1100	1100	0850	0750	0550	0900	1450	1600	1250	1250	1200
<b>(c) Sundries:</b>														
Paper, newsprint.....	Cwt.	Delivered.....	2-1800	2-0500	2-0500	2-0000	2-0000	1-9500	1-9500	2-0500	2-0250	2-0150	2-0150	2-1625
Pulp, Ground wood Mechanical.....	Ton	"		9-0000	9-7500	10-0000	12-5000	13-5000	15-0000	16-2500	16-0000	15-00	16-7080	15-7290
Sulphite, Unbleached.....	"	"			0365		0350	0360	0375	0360		45-0000	43-7500	57-6670
Paper, wrapping, No. 1.....	Lb.	"	1245	1131	1106	1066	1050	1042	0991	0912	0763	0825	0885	0364
Binder Twine, sisal.....	"	Toronto.....	1537	1412	1431	1462	1508	1511	1316	1112	1053	1050	0725	0950
Rope, pure manilla No. 1.....	"	"											1214	1687
Gunpowder, common sporting, 25 lb.....	Keg	Montreal.....	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000	3-5000
Rubber, Parà Isl., fine.....	Lb.	New York.....	7273	9054	1-0875	1-2425	1-2131	1-0633	8708	1-4810	1-9260	1-1160	1-0516	8521
Soap, common.....	Box	Montreal.....	2-6250	2-6250	2-6250	2-6250	2-6250	3-1750	3-1229	2-8500	2-5000	2-5500	3-1250	3-1250
Starch, Canada Laundry.....	Lb.	Toronto.....	0541	0525	0512	0487	0487	0625	0600	0595	0571	0514	0566	0566

\* Mill Cost.

## APPENDIX No. 3.

*Exhibit contributed by Department of Labour, Canada, through Mr. R. H. Coats.*

## RETAIL PRICES, CANADA, 1900-1913.

When the object is to measure cost of living, retail prices offer a better medium than wholesale, being what is actually paid by the consumer. As already pointed out, a smaller number of articles suffice in the investigation of retail prices compared with wholesale; three-fourths of the expenditures of the average family may be included under twenty-five or thirty headings; on the other hand a very much larger number of sources must be consulted, on account of the extent to which local influences operate. It is also much more difficult to obtain a satisfactory basis of retail quotations (each retailer being more or less a law unto himself) and to determine, when quotations for the same locality vary, which should be regarded as "typical." The compilation of retail prices accordingly has been less frequently attempted.

Since the beginning of 1910, a monthly record of retail prices in each city having a population of 10,000 or over throughout the Dominion (fifty-seven in number), has been published in the *Labour Gazette*, the official journal of the Department of Labour. The prices are taken on the fifteenth of each month by local correspondents.<sup>1</sup> The articles included number thirty-six "necessaries"<sup>2</sup> (thirty being foods), as follows: sirloin steak, best; roast beef, medium chuck; veal, forequarter; mutton, hindquarter; fresh roasting pork; salt pork; bacon, best smoked; fresh fish, good quality, variety stated; pure leaf lard; eggs, new laid and packed; milk; butter, dairy, tub and creamery prints; Canadian cheese, new and old; bread; flour, strong bakers; rolled oats; rice, good medium; beans, hand picked; apples, evaporated; prunes, medium quality; sugar, granulated and yellow; tea, black (medium Indian or Ceylon) and green (medium Japan); coffee, Mocha, medium; potatoes; vinegar; white wine; laundry starch; coal, bituminous and anthracite; hard and soft wood; and coal oil.

From this record an adequate idea may be obtained of the movement of retail prices in Canada since 1909.<sup>3</sup> This, however, would illustrate only the closing stages of the recent rise. As it was impossible within the time available to secure an equally comprehensive series backward, it was decided to take the departmental record for a single month in each of the past five years and to obtain for the several localities quotations for the same date in the years 1905 and 1900. In this way, the rise in retail prices since 1900 will be measured, though the annual fluctuations are missed between

<sup>1</sup>These prices are checked and compiled in the Department, an explanation being required from the correspondent for every variation as compared with the preceding month and for every stationary price of over three months standing. While every effort is taken to insure that the quotations are on the same basis throughout, it is not claimed that the individual quotations as between different localities are absolutely comparable (having been collected by different persons), though it is thought that they are broadly so. The claim is made, however, that in each locality the statistics are continuous, and that the variations accurately represent the changes from time to time in price level.

<sup>2</sup>By "necessaries of life" are usually meant the universal needs of the mass of the people including the commoner luxuries or "conventional necessities." Marshall (*Economics of Industry*, p. 60) distinguishes between "necessaries for existence" and "necessaries for efficiency" defining the latter for a workman in England as "a well-drained dwelling with several rooms, warm clothing, with some changes of underclothing, pure water, a plentiful supply of cereal food, with a moderate allowance of meat and milk, and a little tea, etc., some education and some recreation, and lastly sufficient freedom for his wife from other work to enable her to perform properly her maternal and her household duties."

<sup>3</sup>A table showing the average prices for the twelve months of each year (1910, 1911, 1912 and 1913) for the several articles in each city is published in *Wholesale Prices, Canada, 1913*, pp. 241-257. Averages for the Dominion as a whole for each year are added.



1900 and 1905 and again between 1905 and 1909. The month chosen was December, when the volume of household buying is perhaps at its height, the date of the quotations (namely, the second week in the month) being early enough to escape abnormal holiday demands. The quotations in so far as possible were obtained from the books of the retailers who have supplied the later information to the correspondents of the *Labour Gazette*.

The full table of quotations is given at the close of the present section. Such a table, even more than the table of wholesale prices in the preceding section, calls for analysis and explanation, an involved and elusive task, seeing that the variations of the several commodities in obedience to the general trend of the market are often different in different localities. As a preliminary help in this connection the prices of each article have been averaged for each of the provinces and have been inserted in the large table.

#### GENERAL RESULT—SIMPLE AVERAGES.

The first question requiring an answer is, to what extent have commodity prices at retail, considered as a whole, risen in the Dominion, considered as a whole, since the year 1900?

The table beginning on the next page shows the average prices for the whole Dominion for each of the thirty-six commodities in each of the seven years, while the table next following shows the same averages reduced to the form of index numbers with the year 1900 as base. These tables, and especially the final column of the latter, afford the answer to the question just asked. Averaging the increases shown by the thirty-six articles in the fifty-seven localities in the seven years (that is summing up the evidence afforded by the 14,000 quotations contained in the large table) the answer is that the rise in retail prices since 1900 has amounted to 33.6 per cent. The rise between 1900 and 1905 amounted to over six points, or a little over a point a year. Thereafter the upward tendency would appear to have been accelerated, a gain of nearly thirteen points being recorded by 1909, or an average rate of advance of over three points a year. From 1909 to 1912 the rise was at the rate of approximately five points a year. In 1913 there was a slight recession.

## AVERAGE RETAIL PRICES, CANADA, 1900-1913 (INC.).\*

Year.	BEEF		Veal. Fore- quar- ters.	Mut- ton. Hind- quar- ters.	PORK		Bacon Best smok- ed.	Lard Pure Leaf.	EGGS		Milk.	BUTTER		CHEESE		BREAD
	Sirloin Steak.	Me- dium Chuck			Fresh Roast- ing.	Salt.			New Laid.	Pack- ed.		Dairy Tubs. Prints.	Cream- ery Prints.	Can- adian Old.	Can- adian New.	
1900.....	13.6	9.8	10.0	11.8	12.3	10.9	15.4	13.1	25.7	20.2	6.1	22.1	25.5	16.1	14.6	3.7
1905.....	15.2	12.3	11.3	12.2	13.1	12.5	17.8	14.1	30.0	23.4	6.6	24.7	27.7	17.6	15.7	3.9
1909.....	16.8	11.8	11.6	14.6	16.4	16.1	22.0	19.2	41.8	31.8	7.6	26.9	32.0	17.8	17.0	4.4
1910.....	18.2	12.8	12.7	16.8	17.2	16.3	24.3	19.5	44.7	32.0	8.1	27.0	32.0	18.2	17.1	4.3
1911.....	18.4	13.4	13.8	16.7	16.8	15.7	22.6	16.9	45.7	33.0	7.8	29.2	34.9	20.0	19.1	4.4
1912.....	21.5	14.7	15.3	18.1	18.6	16.7	21.4	18.9	47.0	35.4	9.0	32.0	37.0	21.1	19.5	4.3
1913.....	23.3	15.8	16.7	19.4	20.5	18.3	26.0	18.4	49.4	37.4	9.1	30.0	35.4	20.0	19.4	4.3

\*These prices are simple averages of the quotations for 57 cities included in the table at pp. 155-219.

AVERAGE RETAIL PRICES, CANADA, 1900-1913 (INC.).\*

Year.	Flour Strong Bak- er's.	Roll- ed Oats.	Rice Good me- dium.	Beans hand- picked.	Apples Evapo- rated.	Prunes me- dium.	SUGAR		TEA		Coffee Mocha	Po- tatoes.	Vine- gar.	Starch	COAL		WOOD		Coal Oil.
							Granu- lated.	Yellow	Black.	Green.					An- thra- cite.	Bi- tumi- nous.	Hard.	Soft.	
1900.....	2.5	3.6	5.2	4.3	9.9	11.5	5.4	5.0	32.9	35.0	34.6	72.4	11.8	8.8	6.32	4.99	5.20	3.61	24.0
1905.....	2.8	3.9	5.3	4.7	7.7	9.6	5.5	4.9	33.2	34.7	35.1	84.1	11.8	8.9	7.23	5.17	5.64	4.07	24.5
1909.....	3.2	4.3	5.4	5.4	11.4	9.8	5.7	5.0	34.2	36.5	31.7	82.2	11.8	9.3	7.63	5.87	6.85	4.37	24.1
1910.....	3.3	4.1	5.3	5.5	12.1	10.9	6.1	5.3	35.0	36.8	36.7	83.6	11.9	9.2	7.53	6.11	7.01	4.78	23.8
1911.....	3.4	4.4	5.5	5.4	13.4	12.5	6.9	6.2	35.0	37.6	36.7	141.5	12.1	9.5	7.32	5.82	6.43	4.98	23.2
1912.....	3.4	4.5	5.8	6.1	13.0	12.6	6.3	5.9	35.6	37.1	37.9	110.4	12.5	9.5	8.90	6.45	6.79	5.12	23.8
1913.....	3.3	4.3	6.0	5.8	12.4	12.2	5.5	5.4	35.7	37.3	37.7	110.8	12.3	9.0	8.51	6.09	6.58	5.07	23.8

\* These prices are simple averages of the quotations for 57 cities included in the table at pp. 155-219.

## INDEX NUMBERS OF AVERAGE RETAIL PRICES, CANADA, 1900-1913 (INC.).

(1900 Prices=100.)

Year.	BEEF		Veal Fore- quarters.	Mutton Hind- quarters.	PORK		Bacon Best smoked.	Lard Pure Leaf.	EGGS		Milk.	BUTTER	CHEESE		BREAD
	Sirloin Steak.	Me- dium Chuck.			Fresh Roast- ing.	Salt.			New Laid.	Pack- ed.		Dairy Tubs.	Can- adian Old.	Can- adian New.	
1900.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1905.....	111.8	125.5	113.	103.3	106.5	114.6	115.6	107.6	116.7	115.8	108.2	111.8	109.3	107.8	105.4
1909.....	123.9	120.4	116.	123.8	133.3	147.7	142.8	146.5	162.6	157.4	124.6	121.7	110.5	116.2	118.8
1910.....	138.2	130.6	127.	142.3	139.8	149.5	157.7	148.8	173.9	153.4	132.8	120.3	113.0	117.4	116.2
1911.....	139.6	136.7	138.	141.5	136.5	144.0	146.7	128.9	177.8	163.3	127.8	132.1	124.2	130.8	118.8
1912.....	153.0	150.0	153.	153.3	151.2	153.2	138.9	144.2	162.8	175.2	147.5	144.8	131.0	133.5	116.2
1913.....	171.3	161.2	167.	162.7	166.6	167.8	168.8	140.4	162.2	185.1	149.1	135.7	124.2	132.8	116.2



## INDEX NUMBERS OF AVERAGE RETAIL PRICES, CANADA, 1900-1913 (INC.).

(1900 Prices=100.)

Year.	Flour Strong Bak- er's.	Roll- ed. Oats.	Rice Me- dium.	Beans hand- picked.	Apples Eva- por- ated.	Prunes Me- dium quality	SUGAR		T <sub>EA</sub>		Pot- atoes.	Vine- gar.	Starch	COAL		WOOD		Coal Oil.	All.
							Granu- lated.	Yellow	Black.	Green.				An- thra- cite.	Bi- tum- inous.	Hard.	Soft.		
1900.....	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
1905.....	112	108.3	101.9	109.3	77.7	83.4	101.8	98	100.9	99.1	101.4	100.8	101.1	114.4	103.6	108.5	112.9	102.0	105.7
1909.....	128	119.4	103.8	125.6	115.1	85.2	105.5	100	103.9	104.2	91.6	100.0	105.5	120.7	117.6	131.6	121.0	100.4	119.5
1910.....	132	113.9	101.9	127.9	122.2	94.7	102.9	106	106.0	105.1	104.3	100.8	104.5	119.0	122.4	134.8	132.4	99.1	124.1
1911.....	136	122.2	105.7	125.6	135.3	108.7	127.7	124	106.1	107.4	104.3	102.6	107.9	115.7	116.6	123.5	137.9	96.6	126.4
1912.....	136	125	103.8	141.8	131.3	108.7	116.6	118	108.2	106.0	109.5	105.8	107.9	140.7	129.2	130.5	141.7	99.1	134.0
1913.....	132	119.4	111.5	134.8	125.2	106.1	101.8	108.0	108.5	105.5	108.9	104.1	102.2	134.5	101.9	126.6	140.5	99.1	133.6

## GENERAL RESULT—BUDGETS OF WEEKLY FAMILY EXPENDITURES.

The above is an "unweighted" result. But in the case of retail prices where the number of articles is comparatively limited and where marked variations occur in the importance of the articles (as, for example, between beef and vinegar), an unweighted average is unconvincing. Especially is this so in the present instance where the most rapid advances have occurred in meats and other articles of first importance to the consumer. A common way of estimating the final effect of changes in retail prices is by working out a budget of family expenditures, in terms of the prices quoted at different periods. With regard to the quantities to be used in such a budget for Canada, no investigation into family expenditures has ever been made on a sufficient scale to render the results applicable to the country as a whole, and it would appear impracticable to obtain such a budget in a country where conditions of climate, food supply, etc., vary so widely. The Department of Labour, however, has constructed for purposes of statistical measurement a list of quantities based on estimates by various official bodies in the United States and Great Britain and on limited inquiries in Canada which may be regarded as fairly typical of ordinary household expenses per week, and which it will be interesting to apply in the present inquiry.<sup>1</sup>

A table in which this budget has been worked out in the terms of average prices for the whole Dominion in each of the years 1900, 1905, 1909, 1910, 1911, 1912 and 1913, is given below. The first column of this table shows the quantity of each commodity which is regarded as representing the weekly consumption of a family of five. In the succeeding columns, the amounts which these quantities would cost at the average prices of the several articles for the whole of Canada in the respective years are shown.

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<sup>1</sup>This method of weighting, of course, is still open to the objection that the "average" prices themselves in which the calculations are made are "simple," i.e., are obtained by regarding the fifty odd localities included in the survey as of equal importance, whereas the four leading cities alone exceed in population all the others combined. The averages might have been obtained by weighting the localities according to population, but it is thought that the results would not have been changed materially. In the case of the provincial averages used on a later page, the fact that the larger provinces are represented by a greater number of localities automatically introduces a certain degree of weighting.

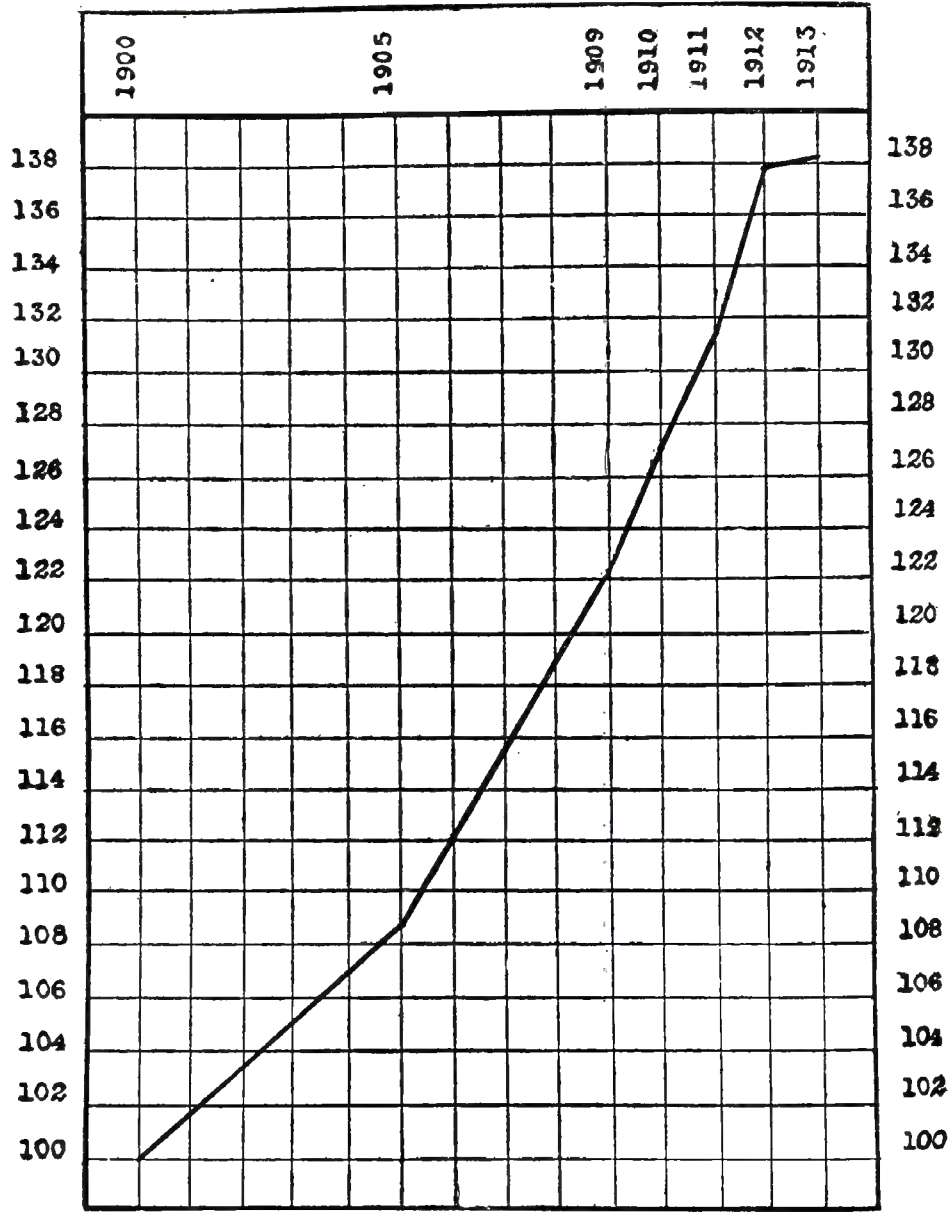
## WEEKLY EXPENDITURES ON STAPLE FOODS, FUEL AND LIGHTING FOR A FAMILY OF FIVE—1900-1913.

Commodity.	Quantity	1900.	1905.	1909.	1910.	1911.	1912.	1913.
		cts.	cts.	cts.	cts.	cts.	cts.	cts.
Beef, sirloin steak.....	2 lbs.....	27.2	30.4	33.6	36.4	36.8	43.0	46.6
Beef, chuck, roast.....	2 ".....	19.6	24.6	23.0	25.6	26.8	29.4	31.6
Veal, forequarter.....	1 ".....	10.0	11.3	11.6	12.7	13.8	15.3	16.7
Mutton, roast, hindquarter.....	1 ".....	11.8	12.2	14.6	16.8	16.7	18.1	19.4
Pork, roasting, fresh.....	1 ".....	12.3	13.1	16.4	17.2	16.8	18.6	20.5
Pork, salt.....	2 ".....	21.8	25.0	32.2	32.6	31.4	33.4	36.6
Bacon, best smoked.....	1 ".....	15.4	17.8	22.0	24.3	22.6	21.4	26.0
Lard, pure leaf.....	2 ".....	26.2	28.2	38.4	39.0	33.8	37.8	36.8
Eggs, fresh.....	1 doz.....	25.7	30.0	36.5	44.7	45.7	47.0	49.4
Eggs, packed.....	1 ".....	20.2	23.4	31.8	32.0	33.0	35.4	37.4
Milk.....	6 qts.....	36.6	39.6	45.6	48.6	46.8	54.0	54.6
Butter, dairy tub.....	2 lbs.....	44.2	49.4	53.8	54.0	58.4	64.0	60.0
Butter, creamery prints.....	1 ".....	25.5	27.7	32.0	32.0	34.9	37.0	35.4
Cheese, Canadian, old.....	1 ".....	16.1	17.6	17.8	18.2	20.0	21.1	20.1
Cheese, Canadian, new.....	1 ".....	14.6	15.7	17.0	17.1	19.1	19.5	19.4
Bread, plain white.....	15 ".....	55.5	58.5	66.0	64.5	66.0	64.5	64.5
Flour, ordinary family.....	10 ".....	25.0	28.0	32.0	33.0	34.0	34.0	33.0
Rolled oats.....	5 ".....	18.0	19.5	21.5	20.5	22.0	22.5	21.5
Rice, good medium.....	2 ".....	10.4	10.6	10.8	10.6	11.0	11.6	12.0
Beans, handpicked.....	2 ".....	8.6	9.4	10.8	11.0	10.8	12.2	11.6
Apples, evaporated.....	1 ".....	9.9	7.7	11.4	12.1	13.4	13.0	12.4
Prunes, medium quality.....	1 ".....	11.5	9.6	9.8	10.9	12.5	12.6	12.2
Sugar, granulated.....	4 ".....	21.6	22.0	22.8	24.4	27.6	25.2	22.0
Sugar, yellow.....	2 ".....	10.0	9.8	10.0	10.6	12.4	11.8	10.8
Tea, black.....	1/4 ".....	8.2	8.3	8.5	8.7	8.7	8.9	8.9
Tea, green.....	1/4 ".....	8.7	8.7	9.1	9.2	9.4	9.3	9.3
Coffee.....	1/4 ".....	8.6	8.8	7.9	9.2	9.2	9.5	9.4
Potatoes.....	2 pks.....	24.1	28.0	27.4	29.5	47.2	36.8	36.9
Vinegar, white wine.....	1/2 pt.....	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Food.....		548.0	595.6	675.6	706.1	741.5	767.6	775.7
Coal, anthracite.....	1-16 ton.....	39.5	45.2	47.7	47.0	45.7	55.6	53.2
Coal, bituminous.....	".....	31.1	32.3	36.7	38.2	36.4	40.3	38.0
Wood, hard.....	1/2 cord.....	32.5	35.3	42.8	43.8	40.2	42.4	41.1
Wood, soft.....	".....	22.6	25.5	27.3	29.8	31.1	32.0	31.7
Coal oil.....	1 gal.....	24.0	24.5	24.1	23.8	23.2	23.8	23.8
Fuel and lighting.....		149.7	162.8	178.6	182.6	176.6	194.1	187.8
Grand total.....		697.7	738.4	854.2	888.7	918.1	961.7	963.5

THE COURSE OF RETAIL PRICES, CANADA, 1900-1913.

Number of Articles Included, 34 (weighted).

Prices in 1900=100.





It will be seen that a weekly family budget which would have cost \$6.97 in 1900, cost \$7.38 in 1905; \$8.54 in 1909; \$8.88 in 1910; \$9.18 in 1911; \$9.61 in 1912 and \$9.63 in 1913.

Representing the cost of the 1900 budget as 100, the rise is as follows:—

1900.	1905.	1909.	1910.	1911.	1912.	1913.
100	108.7	122.4	127.3	131.5	137.8	138.2

As already pointed out, this is doubtless a more accurate index of the retail price movement than the simple average above presented.

#### COMPARISON OF RETAIL FOOD PRICES BY PROVINCES.

The influence of locality on retail prices has been already emphasized. In proceeding to elaborate somewhat on this point it will be of interest to note, first, what has been the general tendency of average prices in the several provinces. To illustrate this, a family budget similar to that employed above has been worked out in the terms of the average prices shown for each province in the large table (pages 155-219). The budget, however, was restricted to foods, as the kind and quantity of fuel used in different sections of the Dominion varies considerably:—

#### WEEKLY EXPENDITURES ON STAPLE FOODS FOR FAMILY OF FIVE.

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	5.611	5.833	6.820	6.892	7.186	7.353	7.357
New Brunswick.....	5.383	5.828	6.514	6.863	7.624	7.458	7.587
Prince Edward Island.....	4.812	5.264	5.899	5.958	6.120	6.247	6.887
Quebec.....	5.147	5.640	6.588	6.592	6.896	7.285	7.423
Ontario.....	5.012	5.598	6.472	6.747	6.665	6.930	7.040
Manitoba.....	5.851	6.194	7.481	7.787	8.001	8.033	8.161
Saskatchewan.....	6.864	6.920	6.935	7.634	8.819	8.814	8.882
Alberta.....	6.024	6.502	7.711	8.010	8.190	8.633	8.563
British Columbia.....	6.899	7.741	8.166	9.055	9.307	9.460	9.122
Dominion of Canada.....	5.480	5.956	6.766	7.061	7.415	7.676	7.757

Making the 1900 total for each province in the above equal to 100, the following series of numbers illustrating the comparative rate at which food prices have advanced in the several provinces is obtained:—

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	103.9	121.5	122.8	128.0	131.0	131.1
New Brunswick.....	100	108.2	121.0	127.4	141.6	138.5	140.9
Prince Edward Island.....	100	109.3	122.5	123.8	127.1	129.8	143.1
Quebec.....	100	109.5	127.9	128.0	133.9	141.5	144.2
Ontario.....	100	111.6	129.1	134.6	132.9	138.2	140.5
Manitoba.....	100	105.8	127.8	133.0	136.7	137.2	139.4
Saskatchewan.....	100	100.8	101.0	111.2	128.4	128.4	129.3
Alberta.....	100	107.9	128.0	132.9	135.9	143.3	142.1
British Columbia.....	100	112.2	118.3	131.2	134.9	137.1	132.2
Dominion of Canada.....	100	108.6	123.2	128.8	135.3	140.0	140.5

Another table of index numbers designed to show the comparative level of food prices in each province from year to year, has been worked out as below and the results charted on the following page. In this table and chart the total cost of a food budget computed in average prices for the whole Dominion in 1900 (namely \$5.48) has been made equal to 100.

INDEX NUMBERS OF WEEKLY EXPENDITURES ON STAPLE FOODS.  
(1900 Cost for whole of Canada—100.)

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	102.3	106.4	124.4	125.7	131.1	134.1	134.4
New Brunswick.....	98.2	106.3	118.8	125.2	139.1	136.0	138.4
Prince Edward Island.....	87.8	96.0	107.6	108.7	111.6	113.9	125.6
Quebec.....	93.9	102.9	120.2	120.2	125.8	132.9	135.4
Ontario.....	91.4	102.1	118.1	123.1	121.6	126.4	128.4
Manitoba.....	106.6	113.0	136.5	142.0	146.0	146.5	148.9
Saskatchewan.....	125.2	126.2	126.5	139.3	160.9	160.8	162.0
Alberta.....	109.9	118.6	140.7	146.1	149.4	157.5	156.2
British Columbia.....	125.8	141.2	149.0	165.2	169.8	172.6	166.4
Dominion of Canada.....	100.0	108.6	123.2	128.8	135.3	140.0	141.5

The above tables throw light on the comparative cost of living in the several provinces and the extent to which this has varied in recent years. In 1900, for example, it would appear that food prices were appreciably higher in Nova Scotia than in Quebec; the distinction, however, disappeared in the last two years. Saskatchewan and British Columbia were about on the same level fifteen years ago, but the latter is now the higher. During 1913, retail prices went down in the cities of Nova Scotia, Alberta and British Columbia, but went up in those of New Brunswick, Prince Edward Island, Quebec and Manitoba. For Canada, as a whole, the rise in food stuffs has been 40.5 per cent. Of the provinces, Quebec shows the most rapid relative rise (44 per cent) and Saskatchewan the least (29 per cent). This, of course, does not imply that the former is now the higher from a cost of living standpoint. From the standpoint of the actual present cost of foods, the most expensive province would appear to be British Columbia, followed by Saskatchewan, Alberta, Manitoba, New Brunswick, Quebec, Nova Scotia, Ontario and Prince Edward Island, in the order named. In all such generalizations regard must be had for the limited number and otherwise special characteristics of the localities included.

#### COMPARISON OF RETAIL FOOD PRICES BY CITIES.

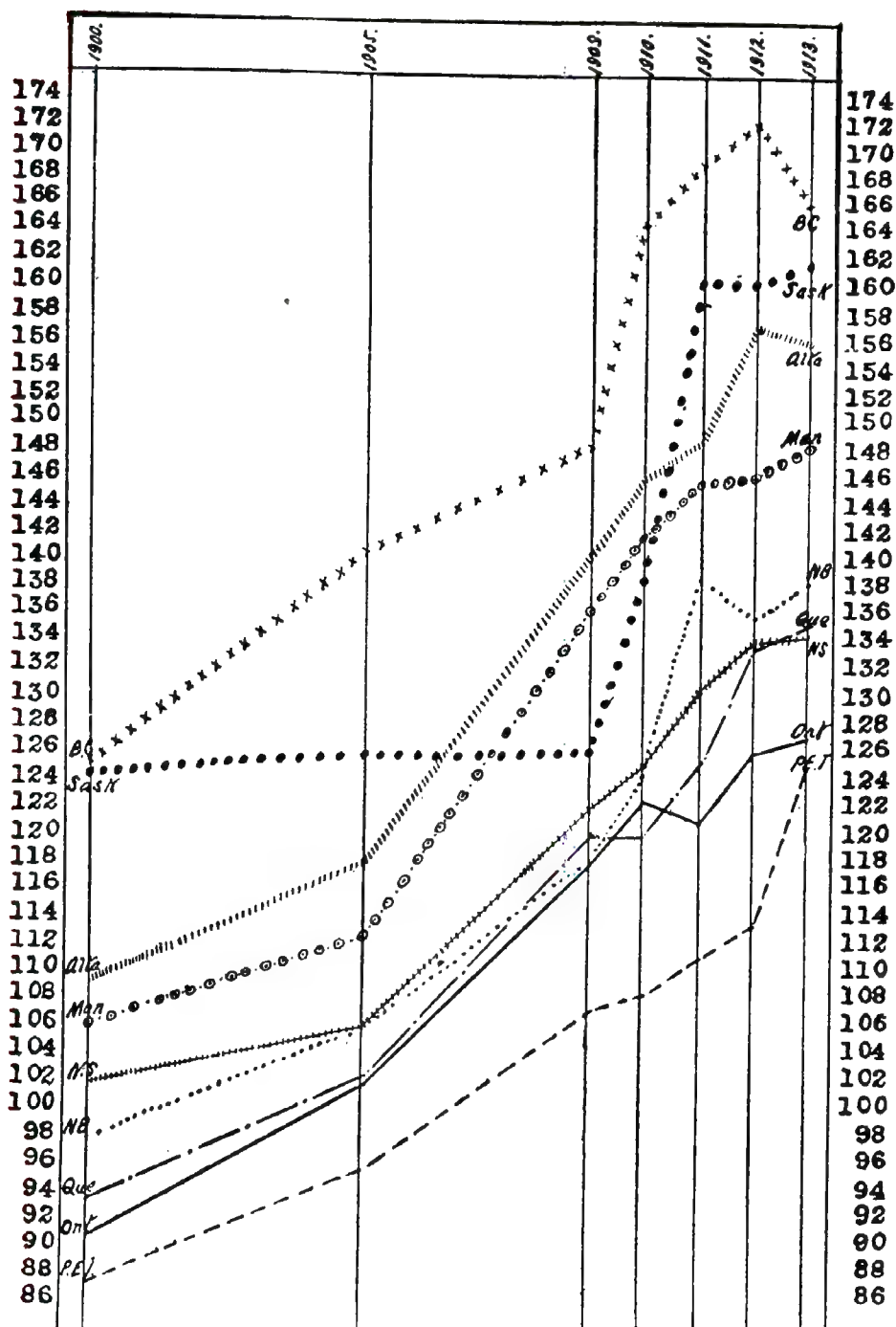
In using the statistics of the large table for the purpose of directly comparing prices in the several cities, it must be remembered that the data have been collected by different persons, and that they were primarily intended to show tendencies from year to year. Every effort, however, was made to secure the same basis of quotation throughout and the results are doubtless comparable in a general way if not invariably in the case of individual quotations.

In the accompanying table, a budget is worked out for each city in terms of 1900, 1905, 1912 and 1913 prices. In the final column an index number is assigned to each city, the number given to the Dominion as a whole being 100. These numbers are based on the figures for 1912-13, corrected in some cases by the earlier data.<sup>1</sup>

<sup>1</sup>As above pointed out, the employment of the same budget throughout is open to the criticism that widely different conditions of living prevail in the different cities,—Edmonton as compared with Halifax, for example, having a longer and more severe winter, necessitating the consumption of more fuel, having less variety and abundance of fish-food, etc. The budget methods of measurement is undoubtedly rough. At the same time it may be argued that such differences amount at the most to tendencies,—fish not being a final substitute for meat, economies of fuel being possible by heating fewer rooms, etc.

## COURSE OF AVERAGE RETAIL PRICES IN LEADING CITIES OF THE SEVERAL PROVINCES, 1900-1913.

(Average Prices, Dominion of Canada, 1900=100).



City.	Cost of Food Budget*.				Per Cent Increase between 1900 and 1913.	Index Numbers of Average Costs (Dominion Average—100)
	1900.	1905.	1912.	1913.		
Nova Scotia—						
Sydney.....	4-6912	4-8578	7-7237	7-9699	69-8	90-3
Westville.....	5-2637	5-4362	7-5355	7-3205	39-0	95-1
Amherst.....	5-5150	6-0550	7-0817	7-2050	30-6	96-2
Halifax.....	5-4050	6-1312	7-5617	8-6850	60-6	103-4
Prince Edward Island—						
Charlottetown.....	4-8120	5-2262	6-3286	6-8869	43-1	86-5
New Brunswick—						
Moncton.....	5-0950	5-4375	6-9897	7-1737	40-5	91-9
St. John.....	5-2237	6-0112	7-9174	7-9390	51-0	100-8
Fredericton.....	5-3962	5-8262	7-4487	7-5987	40-8	97-7
Quebec—						
Quebec.....	4-8600	5-3700	7-3161	7-6078	56-5	93-6
Three Rivers.....	5-1412	5-7112	7-3573	7-0973	38-0	94-1
Sorel.....	5-0362	5-5162	6-7262	7-0562	40-1	90-5
St. Hyacinthe.....	4-5966	4-8216	6-6887	7-0737	53-9	86-3
St. John's.....	5-0925	6-1337	7-5986	7-3519	44-3	97-4
Montreal.....	6-0141	6-9175	7-9334	7-9832	32-7	107-3
Hull.....	4-8748	5-1040	7-1002	7-2186	48-0	90-4
Ontario—						
Ottawa.....	5-1012	5-6828	7-2500	7-8079	53-0	96-1
Brockville.....	5-2906	5-6307	7-2873	7-5081	41-9	95-7
Kingston.....	4-6512	5-1345	6-8912	6-8879	48-0	87-7
Belleville.....	5-4722	5-5944	7-1777	7-2499	32-4	94-6
Peterborough.....	5-0312	5-4112	7-0274	7-2457	44-0	91-9
Orillia.....	5-0312	5-4812	6-6957	7-2548	44-1	91-0
Toronto.....	5-0257	5-5432	7-1873	7-2929	45-1	93-2
Niagara Falls.....	5-4053	6-2786	7-6962	7-7481	43-3	100-9
Hamilton.....	4-8798	5-1548	7-0256	7-5039	53-7	91-4
Brantford.....	5-1624	5-5157	7-3280	7-5270	45-8	95-0
Guelph.....	4-7848	5-2443	7-2415	7-6065	58-9	92-5
Berlin.....	4-7107	5-3445	7-2613	7-4638	58-4	92-6
Woodstock.....	5-2590	5-8590	7-0804	7-2162	37-2	94-5
Stratford.....	4-6874	5-4976	7-1527	7-2099	53-8	91-4
London.....	4-5788	5-6915	7-3657	7-6749	67-6	94-2
St. Thomas.....	5-1675	5-6723	7-0749	7-2029	39-3	93-4
Chatham.....	5-5841	5-8561	7-0448	7-2376	29-6	95-7
Windsor.....	5-5666	6-2707	7-8912	7-6512	37-4	101-9
Owen Sound.....	5-1954	5-3387	6-6524	7-0312	35-3	90-1
Manitoba—						
Winnipeg.....	5-8275	5-9566	8-3237	8-0720	38-5	104-8
Brandon.....	6-0750	6-5150	7-9435	8-2947	36-5	107-2
Saskatchewan—						
Regina.....	7-5253	7-2347	8-9599	8-9499	18-9	121-5
Alberta—						
Edmonton.....	5-3350	6-2925	8-3425	8-0150	50-2	104-1
Lethbridge.....	6-9033	6-8748	8-6775	8-5616	24-0	115-4
British Columbia—						
Nelson.....	7-0050	7-3310	9-4798	9-4573	35-0	123-8
New Westminster.....	6-8068	7-9383	8-9025	9-2591	36-0	122-4
Vancouver.....	6-4071	6-9031	8-7416	8-3913	30-9	113-3
Victoria.....	7-2300	7-5483	10-1025	9-8550	36-3	129-2
Nanaimo.....	7-7316	7-6808	9-0125	9-3450	20-8	125-6
All.....	5-480	5-956	7-676	7-757	41-5	100-0

\*For quantities of Budget see p. 137.



## NOTE ON LOCAL VARIATIONS IN RETAIL PRICES.

The index numbers in the above are to be regarded as suggestive rather than as final measurements. As already remarked, the problem of retail prices is essentially a problem of individual commodities and localities, and for studies of this kind the large table at the end of the section will be found the most useful. Numerous instances occur of differences in prices that cannot be accounted for on economic grounds, but are apparently arbitrary. One such example may be cited:—

In the *Labour Gazette* for June, 1914, bread is quoted at 6 $\frac{3}{4}$  cents per pound in one locality; at 6 $\frac{1}{4}$  cents in five localities; at 6 cents in one locality; at 5 cents and varying fractions in four localities; at 5 cents in five localities; at 4 cents and varying fractions in six localities; at 4 cents in eighteen localities; at 3 cents and varying fractions in twelve localities; and at 2 cents and varying fractions in three localities. Altogether, twenty-one different prices for this article appear in 57 localities, and some of the widest variations occur between localities neighbouring. It is interesting also to note as a variation of this phenomenon the effect of the "Nickel" law in Ontario which came into force in March, 1911, and which raised the weight of the loaf from 1 $\frac{1}{2}$  pound to 1 $\frac{3}{4}$  pound. The table below shows the retail price of bread on the 15th of each month, January to December, 1911, in twenty-five Ontario localities. In seven of the twenty-five the price per loaf, it will be seen, was changed to 6 cents, immediately the law took effect, that is, the price per pound remained stationary; in the other eighteen, no change in the price of the loaf occurred, that is, the price per pound was reduced. Inquiry went to show that the baker pocketed this loss making up for it on "fancy" lines, a procedure which may have been difficult for the small tradesman, tempting him to lower quality or otherwise recoup himself indirectly.

RETAIL PRICES OF BREAD IN ONTARIO CITIES IN MONTHS PRECEDING AND FOLLOWING THE COMING INTO FORCE OF THE "NICKLE" LAW.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.
	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.	Wgt. Price lb. cts.
Ottawa.....	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$
Kingston.....	2 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$
Belleville.....	1 3	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$
Peterborough.....	1 3	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$	3 3 $\frac{1}{2}$
Toronto.....	2 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4	4 4
Niagara Falls.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
St. Catharines.....	2 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Hamilton.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Brantford.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Guelph.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Berlin.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Woodstock.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Stratford.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
London.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
St. Thomas.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Chatham.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Windsor.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Sault Ste. Marie.....	1 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4	3 4
Port Arthur and.....	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$	1 3 $\frac{1}{2}$
Fort William.....	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$	2 4 $\frac{1}{2}$

†Nov. 29, 1910, 3 lb. 10c.

\*5c. per loaf popularly supposed to be 2 lb. in weight.

†Some bakers raised price to 6c. per loaf or 4c. per lb.

## INDEX NUMBERS OF AVERAGE RETAIL COMMODITY PRICES.

One further series of averages may be useful in facilitating the inquiry into causes. In the table below the average price of each commodity in each province and for the Dominion as a whole in the respective years has been reduced to the form of an index number, the 1900 price being made in each case as equal to 100, the main purpose being to show in some detail the rate at which average prices have been going up since 1900.

The table, it will be seen, again reveals how varied are the influences governing retail prices. Sirloin steak, for example, has risen by two and one-half times in Alberta cities, but by less than one and one-half times in those of Saskatchewan and British Columbia since 1900. This probably illustrates the effect of the disappearance of the Alberta ranches on meat prices in the nearby cities, which from being very low in 1900 are now as high as or even higher than in other places. The same commodity, steak, has advanced during the past year in all the provinces except Prince Edward Island where it has remained stationary. On the other hand, medium chuck roasting beef has declined during the past year in Nova Scotia and Alberta, but has advanced in Ontario, New Brunswick, Quebec, Manitoba and Saskatchewan. Similar analyses in almost endless detail could be made in the case of the other commodities. It may be noted that in the case of coal oil, the last on the list, the price has gone down in six of the provinces and advanced in three as compared with the year 1900.

## INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13.

(1900 Prices=100.)

## BEEF (SIRLOIN STEAK).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	107.5	131.2	136.9	138.7	153.8	157.0
Prince Edward Island.....	100	112.5	120.8	125.0	125.0	166.6	166.6
New Brunswick.....	100	107.0	116.9	133.3	140.0	161.4	156.1
Quebec.....	100	117.9	137.4	142.1	144.4	162.4	173.1
Ontario.....	100	114.5	127.4	145.1	146.4	159.3	179.3
Manitoba.....	100	111.1	120.7	117.4	136.6	142.8	158.9
Saskatchewan.....	100	100.0	97.2	108.3	125.0	137.7	141.6
Alberta.....	100	120.9	136.3	150.0	184.5	215.4	240.9
British Columbia.....	100	108.6	101.6	115.2	123.9	136.9	145.1
Dominion of Canada.....	100	111.8	123.9	138.2	139.6	158.0	171.3

## BEEF (MEDIUM CHUCK).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	107.6	125.7	125.7	126.9	126.9	120.0
Prince Edward Island.....	100	112.5	112.5	150.0	150.0	200.0	200.0
New Brunswick.....	100	116.6	123.3	130.0	122.5	126.6	140.0
Quebec.....	100	116.5	158.4	145.3	144.6	156.6	163.0
Ontario.....	100	115.3	109.6	128.0	135.0	147.0	163.1
Manitoba.....	100	125.0	137.5	112.5	132.5	155.0	170.0
Saskatchewan.....	100	100.0	70.0	86.6	120.0	108.0	121.3
Alberta.....	100	120.0	133.3	169.3	182.6	214.6	216.0
British Columbia.....	100	123.2	111.6	130.3	141.9	161.6	167.8
Dominion of Canada.....	100	125.2	120.4	130.6	136.7	150.0	161.8

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Concluded.*

(1900 Prices=100.)

## VEAL (FOREQUARTERS).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	108.7	133.8	132.1	137.2	143.0	159.9
Prince Edward Island.....	100	111.1	222.2	222.2	222.2	222.2	222.2
New Brunswick.....	100	120.0	93.3	120.0	146.6	133.3	160.0
Quebec.....	100	113.2	173.5	151.9	151.3	180.1	181.3
Ontario.....	100	110.9	13.4	130.9	138.0	146.9	172.2
Manitoba.....	100	120.0	111.1	122.2	117.7	146.6	160.0
Saskatchewan.....	100	100.0	94.6	116.6	133.3	130.1	128.0
Alberta.....	100	125.8	117.8	120.5	118.7	189.1	191.9
British Columbia.....	100	108.6	82.6	100.0	113.6	121.7	134.1
Dominion of Canada.....	100	113.0	116.0	127.0	138.0	153.0	167.0

## MUTTON (HINDQUARTERS).

Nova Scotia.....	100	113.8	138.4	160.4	155.2	155.2	175.9
Prince Edward Island.....	100	118.7	137.5	150.0	131.2	200.0	200.0
New Brunswick.....	100	112.5	118.7	131.3	131.3	140.7	134.4
Quebec.....	100	126.6	147.0	149.4	148.6	177.3	179.4
Ontario.....	100	116.9	129.2	148.2	144.4	155.6	178.3
Manitoba.....	100	110.4	98.3	113.4	125.4	131.3	137.3
Saskatchewan.....	100	100.0	97.2	103.8	120.5	137.7	138.8
Alberta.....	100	115.3	131.3	129.9	155.4	172.9	174.4
British Columbia.....	100	100.5	97.2	138.2	129.7	137.0	138.2
Dominion of Canada.....	100	103.3	123.8	142.3	141.5	153.3	162.7

## PORK (FRESH, ROASTING).

Nova Scotia.....	100	57.1	82.3	85.7	87.0	84.4	93.7
Prince Edward Island.....	100	122.7	136.3	127.2	118.1	136.3	145.4
New Brunswick.....	100	122.7	124.2	145.4	140.9	139.3	161.3
Quebec.....	100	104.2	149.2	128.2	122.4	150.6	173.5
Ontario.....	100	112.7	150.8	156.9	148.9	163.7	187.0
Manitoba.....	100	120.0	134.2	145.4	145.4	145.4	152.6
Saskatchewan.....	100	100.0	110.6	113.3	133.3	141.3	150.0
Alberta.....	100	135.0	165.0	178.0	211.0	225.0	212.0
British Columbia.....	100	105.2	98.2	126.3	123.3	135.0	153.2
Dominion of Canada.....	100	106.5	133.3	139.8	136.5	151.2	166.6

## PORK (SALT).

Nova Scotia.....	100	118.7	141.8	139.4	140.7	143.0	168.8
Prince Edward Island.....	100	116.6	116.6	83.3	66.6	116.6	166.6
New Brunswick.....	100	116.6	136.4	155.5	145.2	149.1	161.9
Quebec.....	100	110.2	153.7	139.9	123.6	155.8	170.9
Ontario.....	100	116.0	158.6	163.6	154.0	159.5	176.9
Manitoba.....	100	122.2	114.8	140.7	144.4	133.3	133.3
Saskatchewan.....	100	100.0	100.0	100.0	100.0	138.0	133.3
Alberta.....	100	120.0	200.0	210.0	195.0	192.0	187.0
British Columbia.....	100	113.4	124.1	141.8	139.0	148.9	141.8
Dominion of Canada.....	100	114.0	147.7	149.5	144.0	153.2	167.8



INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*  
(1900 Prices=100.)

## BACON (BEST SMOKED).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	111.4	115.7	125.7	120.6	128.5	138.5
Prince Edward Island.....	100	106.8	124.1	144.8	148.2	117.2	151.1
New Brunswick.....	100	113.1	120.2	139.9	136.1	146.4	159.1
Quebec.....	100	116.6	155.2	152.8	143.3	154.7	173.5
Ontario.....	100	153.2	195.7	208.1	189.9	201.9	229.2
Manitoba.....	100	118.4	131.5	165.9	139.4	131.5	184.2
Saskatchewan.....	100	100.0	125.0	156.0	150.0	137.5	136.5
Alberta.....	100	113.0	133.3	190.0	170.0	180.0	184.0
British Columbia.....	100	106.9	127.9	149.3	141.8	135.8	149.3
Dominion of Canada.....	100	115.6	142.8	157.7	146.7	138.9	168.8

## LARD (PURE LEAF).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	111.3	147.1	145.2	145.2	143.3	145.2
Prince Edward Island.....	100	114.2	128.5	142.8	121.4	128.5	128.5
New Brunswick.....	100	105.5	143.2	143.2	120.3	148.1	144.4
Quebec.....	100	111.1	146.0	147.5	133.8	143.4	154.5
Ontario.....	100	109.8	145.5	146.8	127.2	144.1	146.9
Manitoba.....	100	116.6	146.6	150.0	126.6	126.6	126.6
Saskatchewan.....	100	74.8	125.0	134.2	121.1	114.2	108.5
Alberta.....	100	104.0	156.0	161.6	148.8	156.0	132.8
British Columbia.....	100	108.5	160.1	167.1	141.4	167.1	153.1
Dominion of Canada.....	100	107.6	146.5	148.8	128.9	144.2	140.4

## EGGS (NEW LAID).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	108.0	155.1	172.4	183.9	172.4	187.8
Prince Edward Island.....	100	122.2	166.6	166.6	188.8	172.2	211.1
New Brunswick.....	100	107.6	141.0	153.4	153.4	157.0	177.8
Quebec.....	100	116.0	158.2	152.7	163.7	181.3	198.1
Ontario.....	100	118.9	189.3	242.4	202.2	200.6	221.8
Manitoba.....	100	118.8	258.8	223.5	211.7	200.0	223.5
Saskatchewan.....	100	128.8	166.6	200.0	222.2	233.3	211.1
Alberta.....	100	104.5	150.0	152.2	162.0	157.1	160.5
British Columbia.....	100	95.2	100.9	135.2	125.7	135.2	125.7
Dominion of Canada.....	100	116.7	162.6	173.9	177.5	182.8	192.2

## EGGS (PACKED).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	110.0	159.3	166.2	170.0	167.5	187.5
Prince Edward Island.....	100	122.2	166.6	144.4	122.2	166.6	177.7
New Brunswick.....	100	110.3	135.3	132.3	141.2	142.6	169.3
Quebec.....	100	110.0	155.7	156.2	152.9	182.1	188.1
Ontario.....	100	121.3	166.4	173.7	178.6	191.0	208.0
Manitoba.....	100	128.6	200.0	192.8	214.3	185.7	214.3
Saskatchewan.....	100	100.0	140.0	140.0	140.0	164.8	150.0
Alberta.....	100	102.8	138.8	148.1	148.1	152.5	152.5
British Columbia.....	100	102.7	130.1	130.1	126.7	126.3	130.1
Dominion of Canada.....	100	115.6	157.4	158.4	163.3	175.2	185.1

# INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—Continued

(1900 Prices=100.)

## MILK.

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	108.0	128.0	128.0	132.0	132.0	136.4
Prince Edward Island.....	100	100.0	100.0	120.0	120.0	120.0	140.4
New Brunswick.....	100	113.0	121.1	121.1	126.0	136.1	139.7
Quebec.....	100	110.3	114.2	133.3	131.2	141.6	145.4
Ontario.....	100	109.1	131.9	138.7	139.9	152.9	155.8
Manitoba.....	100	113.6	163.6	181.8	181.8	190.9	181.8
Saskatchewan.....	100	100.0	91.0	100.0	110.0	127.0	127.0
Alberta.....	100	93.3	121.3	124.0	133.3	138.6	140.4
British Columbia.....	100	108.8	121.1	122.2	126.6	137.7	143.2
Dominion of Canada.....	100	108.2	124.6	132.8	127.8	147.5	149.1

## BUTTER (DAIRY TUBS).

	1900	1905	1910	1911	1912	1913
Nova Scotia.....	100	108.6	115.2	114.6	120.6	135.8
Prince Edward Island.....	100	90.9	104.5	113.5	122.7	113.6
New Brunswick.....	100	110.8	126.8	118.0	123.4	143.0
Quebec.....	100	109.8	120.6	115.4	132.0	145.3
Ontario.....	100	114.6	128.3	131.9	143.5	151.1
Manitoba.....	100	125.0	131.2	155.0	165.0	181.2
Saskatchewan.....	100	112.5	137.5	150.0	162.5	175.0
Alberta.....	100	114.0	110.0	120.0	120.0	132.8
British Columbia.....	100	112.2	125.7	134.6	120.8	134.6
Dominion of Canada.....	100	111.8	121.7	120.3	132.1	144.8

## BUTTER (CREAMERY PRINTS).

	1900	1905	1910	1911	1912	1913
Nova Scotia.....	100	106.3	155.0	150.6	167.0	178.4
Prince Edward Island.....	100	104.1	116.6	87.5	116.6	133.3
New Brunswick.....	100	105.3	127.1	117.3	130.0	144.4
Quebec.....	100	111.5	120.2	114.8	130.1	143.8
Ontario.....	100	111.6	127.9	127.8	141.5	146.1
Manitoba.....	100	114.9	155.3	148.9	170.1	170.1
Saskatchewan.....	100	100.0	120.6	120.6	133.3	141.5
Alberta.....	100	105.3	111.6	111.6	127.6	137.3
British Columbia.....	100	101.9	127.4	135.4	138.7	140.3
Dominion of Canada.....	100	108.6	125.5	125.5	136.8	145.1

## CHEESE (CANADIAN OLD).

	1900	1905	1910	1911	1912	1913
Nova Scotia.....	100	104.5	99.2	101.5	118.1	118.1
Prince Edward Island.....	100	106.6	106.6	120.0	120.0	120.0
New Brunswick.....	100	106.6	115.5	113.3	136.6	144.4
Quebec.....	100	105.3	107.4	111.8	115.8	128.8
Ontario.....	100	107.1	117.8	122.6	131.2	137.3
Manitoba.....	100	113.2	135.8	128.3	162.2	171.7
Saskatchewan.....	100	93.3	133.3	133.3	150.0	150.0
Alberta.....	100	91.5	100.0	96.5	106.5	115.0
British Columbia.....	100	104.3	108.6	108.6	133.1	133.6
Dominion of Canada.....	100	109.3	110.5	113.0	124.2	131.0

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## CHEESE (CANADIAN NEW).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	105.0	108.3	111.6	125.0	126.6	126.6
Prince Edward Island.....	100	106.6	106.6	106.6	113.3	120.0	120.0
New Brunswick.....	100	107.1	119.0	116.6	139.2	142.8	133.9
Quebec.....	100	104.0	110.0	116.4	122.5	130.3	127.8
Ontario.....	100	109.0	125.5	123.7	136.1	143.8	141.0
Manitoba.....	100	100.0	120.0	113.3	143.3	141.6	141.6
Saskatchewan.....	100	93.3	133.3	133.3	150.0	150.0	144.0
Alberta.....	100	102.8	114.2	109.1	133.1	131.4	121.1
British Columbia.....	100	110.8	120.4	120.4	141.5	142.1	138.5
Dominion of Canada.....	100	107.8	116.2	117.4	130.8	133.5	132.8

## BREAD.

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	96.7	103.2	106.5	102.4	98.3	98.3
Prince Edward Island.....	100	100.0	116.6	116.6	116.6	116.6	133.3
New Brunswick.....	100	100.0	105.8	122.6	133.4	122.6	119.6
Quebec.....	100	104.1	112.8	114.3	114.9	114.9	121.7
Ontario.....	100	103.1	124.2	117.2	119.4	117.2	121.3
Manitoba.....	100	80.0	88.2	88.2	88.2	88.2	83.2
Saskatchewan.....	100	98.6	98.6	77.2	98.6	85.9	81.2
Alberta.....	100	129.7	108.1	121.6	121.6	133.3	145.9
British Columbia.....	100	105.9	136.5	136.1	143.1	121.1	121.1
Dominion of Canada.....	100	105.4	118.8	116.2	118.8	116.2	116.2

## FLOUR.

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	107.0	129.0	128.3	133.6	122.6	119.5
Prince Edward Island.....	100	150.0	175.0	160.0	150.0	150.0	175.0
New Brunswick.....	100	119.5	127.5	146.7	134.0	137.5	132.2
Quebec.....	100	109.7	138.6	123.4	125.7	129.2	126.9
Ontario.....	100	113.9	127.0	127.8	128.6	131.2	126.5
Manitoba.....	100	108.8	134.2	162.2	140.0	154.2	148.8
Saskatchewan.....	100	93.3	106.6	123.3	143.3	120.0	113.3
Alberta.....	100	106.6	106.6	105.3	116.6	120.0	116.6
British Columbia.....	100	110.0	119.3	125.0	136.0	131.3	113.3
Dominion of Canada.....	100	112.0	128.0	132.0	136.0	136.0	132.0

## ROLLED OATS.

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	126.1	140.1	118.6	114.8	133.5	126.1
Prince Edward Island.....	100	133.3	133.3	133.3	133.3	133.3	133.3
New Brunswick.....	100	115.3	133.2	133.2	126.7	123.0	123.0
Quebec.....	100	107.7	105.2	96.7	110.7	118.7	121.7
Ontario.....	100	108.1	126.5	119.8	127.1	125.9	121.7
Manitoba.....	100	106.9	153.6	125.7	125.7	139.6	139.6
Saskatchewan.....	100	100.0	103.0	142.4	142.4	145.4	127.2
Alberta.....	100	92.6	126.8	100.0	104.8	124.3	102.4
British Columbia.....	100	108.6	101.7	104.3	132.6	110.8	106.5
Dominion of Canada.....	100	108.3	119.4	113.9	122.2	125.0	119.4

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## RICE (GOOD MEDIUM).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	100.0	105.0	95.0	115.0	110.0	110.0
Prince Edward Island.....	100	100.0	100.0	100.0	100.0	100.0	110.0
New Brunswick.....	100	100.0	105.2	105.2	115.8	119.1	110.5
Quebec.....	100	100.0	108.2	100.0	109.5	112.8	110.8
Ontario.....	100	100.7	104.8	99.2	97.0	103.6	106.4
Manitoba.....	100	87.5	127.6	110.5	116.6	116.6	123.5
Saskatchewan.....	100	100.0	62.6	78.3	60.2	73.0	81.9
Alberta.....	100	97.3	73.3	80.0	94.6	102.6	100.0
British Columbia.....	100	105.3	106.2	118.7	126.0	130.3	132.1
Dominion of Canada.....	100	101.9	103.8	101.9	105.9	103.8	111.5

## BEANS (HANDPICKED).

	1900	1905	1906	1910	1911	1912	1913
Nova Scotia.....	100	105.8	117.6	111.7	117.6	141.1	131.7
Prince Edward Island.....	100	114.2	114.2	142.8	142.8	142.8	157.1
New Brunswick.....	100	115.5	145.7	125.0	125.0	150.0	150.0
Quebec.....	100	112.7	130.8	136.9	130.2	114.5	123.9
Ontario.....	100	109.3	115.2	122.3	114.1	146.5	132.4
Manitoba.....	100	72.4	150.0	92.6	110.0	130.0	100.0
Saskatchewan.....	100	100.0	130.0	130.0	110.0	134.0	114.0
Alberta.....	100	100.0	90.9	96.3	120.0	121.8	130.9
British Columbia.....	100	108.3	131.2	158.3	150.0	152.0	150.0
Dominion of Canada.....	100	109.3	125.6	127.9	125.6	141.8	134.8

## APPLES (EVAPORATED).

	1900	1902	1900	1906	1918	1908	1900
Nova Scotia.....	100	102.3	100.0	106.9	118.6	108.4	100.0
Prince Edward Island.....	100	100.0	120.0	120.0	90.0	100.0	160.0
New Brunswick.....	100	95.0	120.0	126.6	146.6	113.3	117.5
Quebec.....	100	103.6	130.0	125.5	138.1	132.8	130.2
Ontario.....	100	107.2	114.7	128.4	142.7	143.6	131.7
Manitoba.....	100	90.0	77.7	91.6	95.0	90.0	81.6
Saskatchewan.....	100	85.6	100.0	109.6	120.0	129.6	114.4
Alberta.....	100	87.6	102.1	98.5	110.2	100.0	95.6
British Columbia.....	100	120.8	137.5	134.3	161.4	147.9	153.3
Dominion of Canada.....	100	77.7	115.1	122.2	135.3	131.3	125.2

## PRUNES (MEDIUM QUALITY).

	1900	1906	1912	1912	1939	1938	1943
Nova Scotia.....	100	106.3	121.2	121.2	139.9	138.5	144.3
Prince Edward Island.....	100	100.0	100.0	120.0	120.0	110.0	140.0
New Brunswick.....	100	103.6	114.7	118.4	144.4	125.8	122.2
Quebec.....	100	103.6	125.8	112.5	119.9	126.2	130.6
Ontario.....	100	108.3	101.1	122.0	136.9	137.2	132.7
Manitoba.....	100	100.0	101.7	127.7	136.1	136.1	125.0
Saskatchewan.....	100	83.2	80.0	89.6	109.6	114.4	104.8
Alberta.....	100	96.4	89.2	100.8	125.8	122.3	102.6
British Columbia.....	100	106.4	110.3	131.1	172.7	168.8	174.0
Dominion of Canada.....	100	83.4	85.2	94.7	108.7	108.7	106.0



INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## SUGAR (GRANULATED).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	89.4	95.7	89.4	107.4	117.4	93.6
Prince Edward Island.....	100	110.0	110.0	110.0	110.0	110.0	110.0
New Brunswick.....	100	109.0	111.1	118.2	139.4	121.7	105.1
Quebec.....	100	103.5	113.4	111.5	129.8	121.4	113.4
Ontario.....	100	100.9	107.5	122.7	127.6	116.0	105.3
Manitoba.....	100	100.0	100.0	104.5	130.3	110.5	110.5
Saskatchewan.....	100	71.0	58.0	65.0	74.0	62.0	66.0
Alberta.....	100	108.9	118.2	112.1	132.1	126.7	116.0
British Columbia.....	100	106.0	106.8	113.4	129.3	115.5	110.3
Dominion of Canada.....	100	101.8	105.5	102.4	127.7	116.6	101.8

## SUGAR (YELLOW).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	91.8	88.4	93.1	111.7	111.7	97.7
Prince Edward Island.....	100	100.0	100.0	90.0	90.0	100.0	100.0
New Brunswick.....	100	108.2	108.2	108.2	133.5	121.4	108.2
Quebec.....	100	107.1	110.4	114.5	138.3	125.0	114.5
Ontario.....	100	91.7	96.6	102.7	119.7	111.9	105.8
Manitoba.....	100	104.7	104.7	119.2	137.1	135.8	123.8
Saskatchewan.....	100	80.0	53.0	58.0	65.0	64.0	61.0
Alberta.....	100	103.7	113.2	116.9	132.0	133.9	116.9
British Columbia.....	100	104.0	101.9	109.6	131.0	119.2	111.5
Dominion of Canada.....	100	98.0	100.0	106.0	124.0	118.0	108.0

## TEA (BLACK).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	104.9	114.9	113.4	102.1	106.4	104.2
Prince Edward Island.....	100	100.0	100.0	100.0	100.0	100.0	100.0
New Brunswick.....	100	73.5	76.4	78.4	82.3	86.2	88.2
Quebec.....	100	101.8	99.5	105.4	112.8	108.2	108.2
Ontario.....	100	100.0	104.1	110.6	107.3	109.6	110.7
Manitoba.....	100	100.0	100.0	100.0	92.8	100.0	100.0
Saskatchewan.....	100	102.5	107.1	107.1	114.2	110.5	110.5
Alberta.....	100	96.9	94.1	96.0	94.1	91.0	92.4
British Columbia.....	100	100.0	107.7	103.8	128.5	109.0	103.6
Dominion of Canada.....	100	100.9	103.9	106.0	106.0	108.2	108.5

## TEA (GREEN).

	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100	105.0	147.4	144.0	155.0	165.0	165.0
Prince Edward Island.....	100	100.0	125.0	125.0	125.0	125.0	125.0
New Brunswick.....	100	100.0	94.4	100.0	103.1	103.6	94.4
Quebec.....	100	105.1	97.5	97.4	117.2	99.9	106.8
Ontario.....	100	102.1	111.2	115.3	112.0	112.7	113.4
Manitoba.....	100	82.7	88.2	82.7	76.5	82.7	82.7
Saskatchewan.....	100	82.0	75.0	80.0	80.0	78.6	78.4
Alberta.....	100	100.9	97.0	100.2	92.9	97.0	95.3
British Columbia.....	100	100.0	108.5	104.8	104.8	109.7	102.4
Dominion of Canada.....	100	99.1	104.2	105.1	107.4	106.0	106.5

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## COFFEE (MEDIUM MOCHA).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	100.0	91.6	94.9	103.3	110.0	110.0
Prince Edward Island.....	100	100.0	100.0	100.0	100.0	100.0	100.0
New Brunswick.....	100	117.6	120.4	123.1	123.1	123.1	123.1
Quebec.....	100	100.8	102.5	104.2	105.1	111.9	102.5
Ontario.....	100	100.4	101.6	108.1	106.0	110.5	112.2
Manitoba.....	100	94.1	88.2	82.7	76.5	82.7	88.2
Saskatchewan.....	100	130.0	122.0	125.0	133.3	122.6	129.0
Alberta.....	100	94.3	133.3	127.6	122.0	125.0	120.6
British Columbia.....	100	100.0	102.6	102.6	105.6	107.8	104.4
Dominion of Canada.....	100	101.4	91.6	104.3	104.3	109.5	108.9

## POTATOES.

	1900	1905	1913	1914	1915	1916	1917
Nova Scotia.....	100	100.0	117.3	113.4	155.7	130.0	153.8
Prince Edward Island.....	100	112.5	150.0	137.5	300.0	93.7	150.0
New Brunswick.....	100	101.5	112.1	129.0	163.0	173.5	142.0
Quebec.....	100	117.2	112.3	166.0	223.9	170.6	161.4
Ontario.....	100	123.6	99.7	114.6	205.4	164.6	162.9
Manitoba.....	100	83.3	106.6	163.3	150.0	110.0	133.3
Saskatchewan.....	100	111.6	183.3	225.0	225.0	152.8	175.0
Alberta.....	100	110.4	115.6	168.7	125.0	128.1	139.0
British Columbia.....	100	122.4	132.6	191.8	190.8	130.6	122.4
Dominion of Canada.....	100	116.1	113.5	122.3	195.4	152.5	153.0

## VINEGAR.

	1900	1905	1913	1914	1915	1916	1917
Nova Scotia.....	100	100.0	111.1	108.3	108.3	100.0	100.0
Prince Edward Island.....	100	100.0	100.0	120.0	120.0	150.0	150.0
New Brunswick.....	100	100.0	114.0	105.2	105.2	105.2	105.2
Quebec.....	100	101.8	126.0	122.4	116.3	126.0	119.3
Ontario.....	100	100.6	100.3	101.1	100.9	100.9	104.4
Manitoba.....	100	71.4	57.1	71.4	77.5	71.4	65.9
Saskatchewan.....	100	100.0	83.3	100.0	100.0	116.6	112.0
Alberta.....	100	104.0	100.0	83.0	91.5	87.5	81.0
British Columbia.....	100	111.6	82.5	82.5	97.0	97.0	94.6
Dominion of Canada.....	100	100.8	100.0	100.8	102.6	105.8	104.1

## STARCH.

	1900	1905	1913	1914	1915	1916	1917
Nova Scotia.....	100	100.0	95.2	90.4	95.2	95.2	95.2
Prince Edward Island.....	100	100.0	80.0	110.0	110.0	110.0	110.0
New Brunswick.....	100	76.9	76.9	69.2	80.7	82.0	80.0
Quebec.....	100	111.2	105.0	112.9	109.6	95.1	111.2
Ontario.....	100	102.3	114.2	114.4	113.1	113.8	113.8
Manitoba.....	100	100.0	100.0	100.0	92.5	92.5	90.0
Saskatchewan.....	100	83.3	66.6	66.6	83.3	78.6	83.3
Alberta.....	100	96.3	101.8	96.9	127.2	113.6	107.2
British Columbia.....	100	104.3	123.6	113.9	113.9	118.2	112.9
Dominion of Canada.....	100	101.1	105.5	104.5	107.9	107.9	102.2

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## COAL (ANTHRACITE).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	107.2	77.7	79.3	77.3	134.5	92.1
Prince Edward Island.....	100	100.0	100.	100.0	100.0	107.1	115.5
New Brunswick.....	100	97.1	101.6	97.5	110.2	127.7	113.4
Quebec.....	100	108.5	116.1	114.5	114.8	142.7	128.1
Ontario.....	100	111.0	113.6	114.2	118.4	132.1	126.1
Manitoba.....	100	93.4	97.7	93.4	98.7	98.0	100.0
Saskatchewan.....	100	105.7	103.8	105.7	100.0	103.7	103.4
Alberta.....	100	107.4	151.9	185.7	274.4	176.7	116.6
British Columbia.....	100	135.5	167.8	163.3	161.5	161.5	167.6
Dominion of Canada.....	100	114.4	120.7	119.0	115.7	140.7	134.5

## COAL (BITUMINOUS).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	98.0	94.0	99.2	100.9	106.6	109.9
Prince Edward Island.....	100	100.0	100.0	100.0	100.0	112.5	125.5
New Brunswick.....	100	103.8	94.4	99.1	107.0	108.5	115.0
Quebec.....	100	112.4	105.3	111.8	121.5	129.7	120.0
Ontario.....	100	96.3	100.6	108.8	109.4	114.1	112.9
Manitoba.....	100	100.0	94.7	94.7	98.7	97.3	94.7
Saskatchewan.....	100	108.0	106.4	106.4	116.1	126.5	127.3
Alberta.....	100	106.6	173.3	143.8	180.0	180.0	173.3
British Columbia.....	100	107.3	119.6	124.2	122.6	166.6	120.5
Dominion of Canada.....	100	103.6	117.6	122.4	116.6	129.2	101.9

## WOOD (HARD).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	113.3	120.0	123.2	126.6	123.2	129.6
Prince Edward Island.....	100	100.0	100.0	100.	100.0	100.0	100.0
New Brunswick.....	100	113.4	104.4	104.4	110.7	126.0	126.0
Quebec.....	100	108.6	131.2	127.6	130.0	149.6	141.3
Ontario.....	100	118.0	135.4	133.7	129.7	139.4	137.5
Manitoba.....	100	104.1	110.5	118.8	141.6	131.1	120.8
Saskatchewan.....	100	106.2	81.2	100.0	112.5	91.6	91.6
Alberta.....	100	53.9	70.7	60.6	66.6	66.6	78.7
British Columbia.....	100	108.5	131.6	134.8	123.6	130.5	126.6
Dominion of Canada.....	100	108.5	131.6	134.8	123.6	130.5	126.6

## WOOD (SOFT).

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	100.0	122.0	122.0	112.3	112.3	116.6
Prince Edward Island.....	100	100.0	100.0	100.0	100.0	100.0	100.0
New Brunswick.....	100	106.1	116.1	116.1	119.0	130.2	124.3
Quebec.....	100	112.7	149.9	149.9	162.5	152.1	158.8
Ontario.....	100	116.5	123.2	123.2	126.3	131.0	134.1
Manitoba.....	100	116.5	150.1	150.1	160.0	169.8	156.5
Saskatchewan.....	100	85.8	93.7	96.8	109.3	85.8	85.8
Alberta.....	100	120.0	104.8	120.0	183.2	140.	160.0
British Columbia.....	100	114.2	185.7	161.7	157.1	180.0	157.1
Dominion of Canada.....	100	112.9	121.0	132.4	137.9	141.7	140.5

INDEX NUMBERS OF AVERAGE COMMODITY PRICES, 1900-13—*Continued.*

(1900 Prices=100.)

## COAL OIL.

	1900.	1905.	1909.	1910.	1911.	1912.	1913.
Nova Scotia.....	100	93.6	91.5	88.0	82.1	85.2	88.0
Prince Edward Island.....	100	104.1	104.1	104.1	104.1	91.7	91.7
New Brunswick.....	100	86.7	85.4	86.7	83.4	77.6	84.4
Quebec.....	100	101.5	105.6	98.2	97.6	102.1	106.7
Ontario.....	100	62.3	104.5	99.8	105.7	105.8	106.5
Manitoba.....	100	100.0	85.6	85.6	78.5	78.5	78.5
Saskatchewan.....	100	114.2	100.0	100.0	92.8	89.1	85.7
Alberta.....	100	100.0	93.7	83.2	83.2	80.7	80.7
British Columbia.....	100	100.0	109.1	119.1	108.0	113.5	106.3
Dominion of Canada.....	100	102.0	100.4	99.1	96.6	99.1	99.1



## RETAIL PRICES, CANADA, 1900-1913—(inclusive.)

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Nova Scotia—Sydney.</i>							
Beef—Sirloin, per lb.....			17	18	18	22	22
Medium chuck, per lb.....			12-13	12½	13	14	16
Veal forequarter, per lb.....			12		10	10-12	12
Mutton hind quarter, per lb.....			14	15	15	16	18
Pork—Fresh roasting, per lb.....			15	15	16	18	20
Salt, per lb.....			17	12½	16	16-18	20
Bacon, best smoked per lb.....			20	20	20-22	22	23
Fish—Fresh, good quality per lb.....			06	05-08	08	05-07	06
Lard—Pure leaf, per lb.....	13	13	18	17	17	20	20
Eggs—New laid, per dozen.....	20	22	30	30		40	50
Packed per dozen.....			30		34	32	40
Milk—Per quart.....	08	08	10		10	10	10
Butter—Dairy tub, per lb.....	23	23	28	24	28	35	30-32
Creamery prints, per lb.....	27	28	30	29	34	40	38
Cheese—Canadian old, per lb.....	15	17	16	18	20	20	20
Canadian new, per lb.....							
Bread—For 1 lb. loaf per lb.....	06	06	06	06	05	05	05
Flour—Strong, bakers, per lb.....	2½	02½	03½	a 03½	c 03	d 03½	d 03½
Rolled Oats—Per lb.....	04	05	05	04	04	04	04
Rice—Good medium, per lb.....	05	05	05	04	05	05	05
Beans—Hand picked, per lb.....	04	05	05	04	05	06	05
Apples—Evaporated, per lb.....	12	10	10	12	12	10	10
Prunes—Medium quality, per lb.....		09	10	08-12	12-15	12	10
Sugar—Granulated in 5 lots, per lb.....	06	05	06	05	07	07	06
Yellow in 5 lots, per lb.....	05	4½	05	05	5½	06	05
Tea—Black medium India or Ceylon, per lb.....	25	25	30	23-35	25	30-40	25-50
Green medium Japan, per lb.....					40	60	60
Coffee—Medium Mocha, per lb.....	40	40	30	40 25	40	40	40
Potatoes—Per bag of 1½ Bushels.....	60	65	80	1.00	1.05	90	1.20
Vinegar—White wine XXX per quart.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	08	10	10	08	10	10	10
Coal—Anthracite per ton of 2,000 lb.....			7.00	7.50	6.50	7.25	8.25
Bituminous per ton of 2,000 lb.....	4.00	3.00	7.50/ 2.00/ 3.00	3.00	3.50	3.50	3.50
Wood—Hard best per long cord.....	2.50	4.00		4.00	4.50	4.00	5.00
Soft, per cord.....		2.50			3.50	2.50	3.00
Coal oil—Per gallon.....	20	20	25	22	20	20	22

NOTE—(a) Flour \$5.95 per bbl.

(c) " \$6.00 " "

(d) " .85 " bag 25 lbs.

1911 and 1913.... Fish.... Cod.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Nova Scotia—S. Westville.</i>							
Beef—Sirloin, per lb.....	12	12	15-17	15	15	18	18
Medium chuck, per lb.....	10	10	15	12	12	12	14
Veal forequarter, per lb.....	05	05	08	07-10	08	08	10
Mutton, hindquarter, per lb.....	08	09	14	14	14	15	15
Pork—Fresh roasting, per lb.....	05	06	12-15	16	16	15	15
Salt, per lb.....	11	13	14	17	16	15	18
Bacon, best smoked, per lb.....			18	23-25	16-21	22	24
Fish—Fresh, good quality, per lb.....	04-12	06-15	07	14	06	07-15	C7-15
Lard—Pure leaf, per lb.....	14	14	20	20	16	20	20
Eggs—New laid, per dozen.....	14	15	30	30	35	35	40
Packed, per dozen.....	14	15		30	32	35	35
Milk—Per quart.....	06	07	07	07	07	07	08
Butter—Dairy tub, per lb.....	24	24	25	25-30	25	35	34
Creamery prints, per lb.....			28	30	33	35	36
Cheese—Canadian old, per lb.....	16	14	16	16	18	20	18
Canadian new, per lb.....						20	18
Bread—For 3 lb. loaf, per lb.....	04	04	04 $\frac{2}{3}$	04 $\frac{2}{3}$	04 $\frac{2}{3}$	04 $\frac{2}{3}$	04 $\frac{2}{3}$
Flour—Strong Bakers, per lb.....	2 $\frac{3}{8}$	03	3 $\frac{3}{8}$	04	04	03 $\frac{3}{4}$	03 $\frac{3}{4}$
Rolled Oats—Per lb.....	03	04	05	04	04	05	05
Rice—Good medium, per lb.....	05	05	05	05	05	05	05
Beans—Hand picked, per lb.....	05	05	05	05	05	07	06
Apples—Evaporated, per lb.....	14	14	10-12	10	12	13	13
Prunes—Medium quality, per lb.....	10	10	10	10	11-13	13	13
Sugar—Granulated in \$ lots, per lb.....	06 $\frac{1}{2}$	05 $\frac{1}{2}$	05 $\frac{1}{2}$	05 $\frac{1}{2}$	07	06	05 $\frac{1}{2}$
Yellow, in \$ lots, per lb.....	06 $\frac{1}{2}$	05 $\frac{1}{2}$	05	05 $\frac{1}{2}$	06 $\frac{1}{2}$	06	05 $\frac{1}{2}$
Tea—Black medium India or Ceylon, per lb.....	30	35	30	30	30	30	30
Green medium Japan, per lb.....	30	30	25	25	25	25	25
Coffee—Medium Mocha, per lb.....	35	35	30-35	35	35	35	35
Potatoes—Per bag of 1 $\frac{1}{2}$ bushels.....	60	60	75	90	90	75	90
Vinegar—White Wine XXX, per quart.....	10	10	10	09	09	08	08
Starch—Laundry, per lb.....	10	10	10	10	10	10	10
Coal—Anthracite per ton of 2,000 lb.....							
Bituminous per ton of 2,000 lb.....	3.20	3.20	3.20	3.20	3.20	3.20	3.50
Wood—Hard best per long cord.....	3.25	3.50	4.00	4.00	4.00	4.00	4.00
Soft per cord.....	3.00	3.25	3.50	3.50	3.50	3.50	3.50
Coal oil—Per gallon.....	26	22	20	20	18	19	20

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette* Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Nova Scotia—Amherst.</i>							
Beef—Sirloin, per lb.	12-14	16	16-18	18	19	18	20
Medium chuck, per lb.	09-12	13	14-16	14-16	15	14	15
Veal forequarter, per lb.	10	12	12	12	15	15	15
Mutton hindquarter, per lb.	12	12	12	10-15	15	14	15
Pork—Fresh roasting, per lb.	12	14	16	18	18	15	17
Salt, per lb.	11	13	14	16	14	14	16
Bacon, best smoked, per lb.	20	21	20-22	24	24	25	25
Fish—Fresh, good quality, per lb.	14	15	20-25	14	15-18	17	18
Lard—Pure leaf, per lb.	14	17	20	20	18	18	19
Eggs—New laid, per dozen	23	25	35-40	40	40	35	38
Packed per dozen	21	23	30-40	38	35	32	35
Milk—Per quart.	05	05	07	07	08	07	07
Butter—Dairy tub, per lb.	25	26	25	26	28	32	30
Creamery prints, per lb.	27	28	30-35	28	30	35	32
Cheese—Canadian old, per lb.	14	16	16	16	20	18	20
Canadian new, per lb.	14	16	16	16	20	18	20
Bread—For 2 lb. loaf, per lb.	04						
For 1½ lb loaf, per lb.		4½	4½	5½	5½	4½	4½
Flour—Strong Bakers, per lb.	03½	03½	3½	04	04½	03½	03½
Rolled Oats, per lb.	03	04	04	04	04	04	04
Rice—Good medium, per lb.	05	05	05	05	06	06	06
Beans—Hand picked, per lb.	04	04	05	05	05	05	06
Apples—Evaporated, per lb.	07	08	10	12	12	12	10
Prunes—Medium quality, per lb.	07	08	10	12	11	11	12
Sugar—Granulated in 5 lots, per lb.	06	05½	05½	05	06½	06½	05½
Yellow, in 5 lots, per lb.	05½	05	05	04½	06	06	05½
Tea—Black medium India or Ceylon, per lb.	30	30	30-60	40	30-40	30	30
Green medium Japan, per lb.	30	30	40-45	40	30-40	30	30
Coffee—Medium Mocha, per lb.	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.	60	60	75	90	90	98	90
Vinegar—White wine XXX, per quart.	08	08	10	10	10	08	08
Starch—Laundry, per lb.	12	12	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.	7.00	7.25	6.75	6.50	6.75\$	10.50	8.50
Bituminous, per ton of 2,000 lb.	4.60	4.60	4.75	4.60	4.60	.....	5.00
				4.75	4.75		
Wood—Hard best per long cord.	4.25	4.50	5.00	5.00	5.00	5.00	5.00
Soft, per cord.	3.00	3.25	.....	4.00	4.00	4.00	4.00
Coal oil—per gallon.	23	22	22	22	20	20	20

NOTE—1910—Fish—Cod.  
 1911—“ “  
 1911—“ “—Halibut.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Nova Scotia—Halifax.</i>							
Beef—Sirloin, per lb.	15	15	20	22	22	24	24
Medium chuck, per lb.	12	12	12	15	12-15	15	17
Veal forequarter, per lb.	08	08	08-10	08-10	10	10	12
Mutton, hindquarter, per lb.	10	12	13-15	18	14-18	15	20
Pork—Fresh roasting, per lb.	10	12	16-18	15	15	15	18
Salt, per lb.	10	12	14-17	14	14	15	18
Bacon, best smoked, per lb.	15	18	22	20	20-22	20-22	25
Fish—Fresh, good quality, per lb.	04-06	04-06	05-12½	07-15	05-15	06-15	10
Lard—Pure leaf, per lb.	12	15	20	20	18	18	18
Eggs—New laid, per dozen.	30	32	35-40	50	50-60	40	50-60
Packed, per dozen.	25	28	30-35	35	35	35	40
Milk—Per quart.	06	07	08	08	08	09	09
Butter—Dairy tub, per lb.	20	27	28	28	30	35	30
Creamery prints, per lb.	25	28	32	32	35	35-38	35
Cheese—Canadian old, per lb.	21	22	17-18	17	20	20	20
Canadian new, per lb.	15	16		17	17	18	18
Bread—For 1½ lb. loaf, per lb.	03½	04	04½	04½	04½	04½	04½
Flour—Strong Bakers, per lb.	02½	03	04	03½	03½	03½	03
Rolled Oats—Per lb.	03½	04	05	04	03½	05	04
Rice—Good Medium, per lb.	05	05	05-07	05	07	06	06
Beans—Hand picked, per lb.	04	04	05	05	05	06	06
Apples—Evaporated, per lb.	10	12	12	12	15		10
Prunes—Medium quality, per lb.	09	10	12	10	12	10-15	15
Sugar—Granulated, in \$ lots, per lb.	05	05	05½	05½	07	06	05
Yellow, in \$ lots, per lb.	04½	04½	04	05	06	06	04½
Tea—Black Medium India or Ceylon, per lb.	25-40	25-40	30	30-40	30	30	30
Green Medium Japan, per lb.	40	45	60	40-50	50-60	50	50
Coffee—Medium Mocha, per lb.	30	30-40	35	35	40	40-60	40-60
Potatoes—Per bag of 1½ bushels.	75	75	75	1 05	1 20	75	\$1 00
Vinegar—White Wine XXX, per quart.	08	08	10	10	10	10	10
Starch—Laundry, per lb.	10	10	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.	6 25	6 75	6 60	7 00	7 25	9 00	7 75
Bituminous, per ton of 2,000 lb.	4 85	4 90	4 60	5 00	5 00		
Wood—Hard, best, per long cord.	5 00	5 00	5 00	5 25	5 25	5 75	5 75
Soft, per cord.	3 00	3 00		3 50	3 50	5 50	5 50
Coal Oil—Per gallon.	25	25	20	20	20	22	22

Note.—1910, 1911 and 1912.... Fish—Cod.  
1913.... Fish—Cod.



## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Nova Scotia—Truro.</i>							
Beef—Sirloin, per lb.	15-18	18-20					20
Medium chuck, per lb.	10-12½	12-15					12½
Veal, forequarter, per lb.	06-08	08-10					10-15
Mutton, hindquarter, per lb.	08-10	10-12					12-15
Pork—Fresh roasting, per lb.	10-12	12-15					18
Salt, per lb.	12-12½	14-15					18
Bacon, best smoked, per lb.	18	20					24
Fish—Fresh, good quality, per lb.	08-10	12-15					18
Lard—Pure leaf, per lb.	13	15					20
Eggs—New laid, per dozen.	25	32					45
Packed, per dozen.	20	28					
Milk—Per quart.	06	06					07
Butter—Dairy tub, per lb.	20	22					35
Creamery prints, per lb.	25	25					38
Cheese—Canadian old, per lb.	16	16					20
Canadian new, per lb.							
Bread—For 1½ lb. loaf, per lb.	04	04					04½
Flour—Strong Bakers, per lb.	03½	03½					03½
Rolled Oats—Per lb.	03	03					04
Rice—Good Medium, per lb.	05	05					05
Beans—Hand picked, per lb.	05	05					05
Apples—Evaporated, per lb.	08	08					12½
Prunes—Medium quality, per lb.	08	08					15
Sugar—Granulated in \$ lots, per lb.	05	05					05½
Yellow, in \$ lots, per lb.	04	04					05
Tea—Black Medium India or Ceylon, per lb.	35-50	30-50					30-40
Green Medium Japan, per lb.							
Coffee—Medium Mocha, per lb.	40	40					40
Potatoes—Per bag of 1½ bushels.	75	75					97½
Vinegar—White Wine XXX, per quart.	25	35					08
Starch—Laundry, per lb.	10	10					10
Coal—Anthracite, per ton of 2,000 lb.	8 00	8 00					8 00
Bituminous, per ton of 2,000 lb.	4 00	4 50					5 00
Wood—Hard, best, per long cord.	3 00	3 50					5 00
Soft, per cord.	2 00	2 00					3 00
Coal Oil—Per gallon.	24	25					20

Note.—1913... Fish—Halibut.

1913... Flour—90 cts. per 25 lb. bag

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Nova Scotia—Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<b>Beef</b> —Sirloin, per lb.....	13.3	14.3	17.5	18.2	18.5	20.5	21.0
Medium chuck, per lb.....	10.8	11.7	13.6	13.6	13.7	13.7	13.0
Veal, forequarter, per lb.....	7.7	8.3	10.2	10.1	10.5	11.0	12.2
Mutton, hindquarter, per lb.....	9.7	11.0	13.3	15.5	15.0	15.0	17.0
<b>Pork</b> —Fresh roasting, per lb.....	18.7	10.7	15.4	16.0	16.2	15.7	17.5
Salt, per lb.....	10.7	12.7	15.1	14.8	15.0	15.2	18.0
Bacon, best smoked, per lb.....	17.5	19.5	20.2	22.0	21.1	22.5	24.2
<b>Lard</b> —Pure leaf, per lb.....	13.2	14.7	19.5	19.2	17.2	19.0	19.2
<b>Eggs</b> —New laid, per dozen.....	21.7	23.5	33.7	37.5	40.0	37.5	40.7
Packed, per dozen.....	20.0	22.0	31.9	33.2	34.0	33.5	37.5
<b>Milk</b> —Per quart.....	6.2	6.7	8.0	8.0	8.2	8.2	8.5
<b>Butter</b> —Dairy tub, per lb.....	23.0	25.0	26.5	26.4	27.7	34.2	31.2
Creamery prints, per lb.....	19.7	21.0	30.6	29.7	33.0	36.6	35.2
<b>Cheese</b> —Canadian old, per lb.....	16.5	17.2	16.4	16.7	19.5	19.5	19.5
Canadian new, per lb.....	15.0	15.7	16.2	16.7	18.7	19.0	19.0
<b>Bread</b> —Per lb.....	4.9	4.7	5.0	5.2	4.9	4.8	4.8
<b>Flour</b> —Strong Bakers, per lb.....	2.8	3.0	3.6	3.6	3.7	3.5	3.4
Rolled oats—Per lb.....	3.4	4.2	4.7	4.0	3.8	4.5	4.2
<b>Rice</b> —Good medium, per lb.....	5.0	5.0	5.2	4.7	5.7	5.5	5.5
<b>Beans</b> —Hand picked, per lb.....	4.2	4.5	5.0	4.7	5.0	6.0	5.6
<b>Apples</b> —Evaporated, per lb.....	10.7	11.0	10.7	11.5	12.7	11.7	10.7
<b>Prunes</b> —Medium quality, per lb.....	8.7	9.2	10.5	10.5	12.1	12.0	12.5
<b>Sugar</b> —Granulated, in \$ lots, per lb.....	5.9	5.2	5.6	5.2	6.3	6.3	5.5
Yellow, in \$ lots, per lb.....	5.4	4.9	4.9	5.0	6.0	6.0	5.2
<b>Tea</b> —Black Medium India or Ceylon, per lb.....	29.4	30.8	33.7	38.5	30.0	31.2	30.6
Green Medium Japan, per lb.....	25.0	26.2	36.8	36.0	38.7	41.2	41.2
<b>Coffee</b> —Medium Mocha, per lb.....	37.5	37.5	34.4	35.6	38.7	41.2	41.2
<b>Potatoes</b> —Per bag of 1½ bushels.....	65.0	65.0	76.2	73.7	101.2	84.5	100.0
<b>Vinegar</b> —White Wine XXX, per gallon.....	9.0	9.0	10.0	9.7	9.7	9.0	9.0
<b>Starch</b> —Laundry, per lb.....	10.5	10.5	10.0	9.5	10.0	10.0	10.0
<b>Coal</b> —Anthracite, per ton of 2,000 lb.....	6.62	7.10	5.15	5.25	5.12	8.91	6.10
Bituminous, per ton of 2,000 lb.....	4.03	3.95	3.79	4.00	4.07	4.30	4.44
<b>Wood</b> —Hard best, per long cord.....	3.75	4.25	4.50	4.62	4.75	4.62	4.87
Soft, per cord.....	3.00	3.00	3.67	3.67	3.37	3.37	3.50
<b>Coal Oil</b> —Per gallon.....	23.7	22.2	21.7	21.0	19.5	20.2	21.0

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Prince Edward Island—Charlottetown.</i>							
Beef—Sirloin steak best, per lb.	12	13-14	15-14	14-16	14-16	20	20
Medium chuck, per lb.	08	00	09-10	10-14	10-14	16	16
Veal forequarter, per lb.	03-06	04-06	—	—	—	10	10
Mutton hindquarter, per lb.	07-09	09-10	10 12	12	09-12	16	16
Pork—Fresh roasting, per lb.	10-12	13-14	15	14	12-14	15	16
Salt, per lb.	12	14	14	08-12	07-09	14	20
Bacon, best smoked, per lb.	14-15	15-16	18	20-23	20-23	17	22
Fish—Fresh, good quality, per lb.	—	—	08-10	08-10	—	05	05
Lard—Pure Leaf, per lb.	14	16	18	20	16-18	18	18
Eggs—New laid, per dozen.	18	22	30	30	33-35	30-32	38
Packed, per dozen.	—	—	30	28	22	30	32
Milk—Per quart.	—	—	05	06	06	06	07
Butter—Dairy tub, per lb.	22	20	23	25	26-28	28	25
Creamery prints, per lb.	24	25	28	21	28	32	30
Cheese—Canadian old, per lb.	—	—	16	18	18	18	18
Canadian n.w., per lb.	—	—	—	16	17	18	18
Bread—For 2 lb. loaf, per lb.	—	—	03½	03½	03½	03½	04
Flour—Strong bakers, per lb.	02	—	03½	03½	03	03	03½
Rolls Oats—Per lb.	—	—	04	04	04	04	04
Rice—Good medium, per lb.	—	05	05	05	05	05	05-06
Beans—Hand picked, per lb.	03½	04	04	05	05	05	05-06
Apples—Evaporated, per lb.	—	—	12	12	08-10	10	16
Prunes—Medium quality, per lb.	—	—	10	08-14	18-14	10-12	14
Sugar—Granulated in \$ lot per lb.	05	05½	05½	05½	05½	05½	05½
Yellow in \$ lot per lb.	—	05	05	05-04	04 05	05	05
Tea—Black medium India or Ceylon, per lb.	—	—	25	25	25	25	25
Green medium Japan, per lb.	—	—	50	50	50	50	50
Coffee—Medium Mocha, per lb.	—	—	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.	40	45	60	55	1-20	36-40	60
Vinegar—White Wine XXX, per gallon.	—	—	10	12	12	15	15
Starch—Laundry per lb.	—	—	08	10-12	10-12	10-12	10-12
Coal—Anthracite, per ton of 2000 lb.	—	—	6 50	6 50	6 50	7 00	7 50
Coal—Bituminous, per ton of 2000 lb.	—	—	—	4 00	4 00	4 50	5 00
Wood—Hard, best, per long cord.	—	—	—	—	4 00	4 00	4 00
Soft, per cord.	—	—	—	—	—	—	4 00
Coal Oil—Per gallon.	24	25	25	25	25	22	22

Note.—1910.... Fish—Cod.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>New Brunswick—Moncton.</i>							
Beef—Sirloin steak best, per lb.....	14	16	18	18	20	20	20
Medium chuck, per lb.....	10	12	12	14	12	12	16
Veal forequarter, per lb.....			07				
Mutton hindquarter, per lb.....			12	12	12		
Pork—Fresh roasting, per lb.....	12	14	14	16	16	16	18
Salt, per lb.....	10	12	14	16	16	16	16
Bacon, best smoked, per lb.....	18	20	16	22	25	23	25
Fish—Fresh good quality, per lb.....	05	05	05-08	06-18	06-18	06	07
Lard—Pure leaf per lb.....	15	16	18	20	18	20	20
Eggs—New laid, per dozen.....	22	25	35	35	35	35	45
Packed, per dozen.....	18	20	30	30	28	32	35
Milk—Per quart.....	06	07	07	07	08	08-07	08
Butter—Dairy tub, per lb.....	21	22	26	24	25	32	30
Creamery prints, per lb.....	25	26	30	28	30	35	35
Cheese—Canadian old, per lb.....			18				
Canadian new, per lb.....	14	16		17	20	20	18
Bread—For 2 lb. loaf, per lb.....	03½	03½	04	04	04	04	04
Flour—Strong bakers, per lb.....	03½	03½	03½	03½	03½	03½	03½
Rolled Oats—Per lb.....	03½	03½	04	04	04	04	04
Rice—Good medium, per lb.....	04	04	05	05	05	05	04
Beans—Hand picked, per lb.....	04	05	05-10	05	05	05	07
Apples—Evaporated, per lb.....	09	10	12	12	14	10	10
Prunes—Medium quality, per lb.....	08	09	10	10	14	10	10
Sugar—Granulated in \$ lots, per lb.....	05	05	05½	05½	06½	05½	05
Yellow, in \$ lots, per lb.....	04½	05	05	05	06½	05½	05
Tea—Black Medium India or Ceylon, per lb.....	35	35	35	35	35	35	35
Green medium Japan, per lb.....	40	40	50-40	40	40	40	40
Coffee—Medium Mocha, per lb.....	35	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushel.....	75	75	75	90	90	90	90
Vinegar—White wine XXX, per gallon.....	08	08	10	10	10	10	10
Starch—Laundry, per lb.....	08	08	10	10	10	10	10
Coal—Anthracite, per ton of 2000 lb.....			6 75	6 75	7 50		8 00
Bituminous, per ton of 2000 lb.....	5 00	5 25	5 25	5 25	5 25	5 25	5 75
Wood—Hard, best, per long cord.....	4 25	4 50	4 50	4 50	5 00	5 50	5 50
Soft, per cord.....	2 75	3 00		3 25	3 50	3 50	3 50
Coal Oil—Per gallon.....	24	22	23	22	21	20	20

Note.—1900 to 1913 inclusive . . . Fish—Cod.  
 1910 and 1911 . . . . . Fish—Halibut.  
 1911 and 1912, 1913 . . . . . Flour 25 lb. bag, 90cts.

1910 . . . . . Flour—196 lb. Barrels.



## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>New Brunswick—St. John.</i>							
Beef—Sirloin steak best, per lb.....	16	18-20	18-22	20-22	22	24	24
Beef—Medium chuck, per lb.....	12	12-14	10-20	12	12	14	14
Veal forequarter, per lb.....	10	12	05-07	09-10	12	12	14
Mutton hindquarter, per lb.....	12	12	14	16	15	16	18
Pork—Fresh roasting, per lb.....	12	14	15	16	14	16	20
Salt, per lb.....	10	12	15	16	15	15	18
Bacon, best smoked, per lb.....	15	17	20-22	20	20	20	23
Fish—Fresh good quality, per lb.....	05	05	06	07	06	06	06
Lard—Pure leaf per lb.....	14	14	20	18-20	18	20	20
Eggs—New laid, per dozen.....	32	32	40	50	50	45-50	60
Packed, per dozen.....	25	27	32	30	35	35	35-40
Milk—Per quart.....	06	06	07	07	07	08	08
Butter—Dairy tub, per lb.....	22	25	28	24-27	25-30	34	32
Creamery prints, per lb.....	26	28	33	30	35	38	35-38
Cheese—Canadian old per lb.....	16	16	16-18	18	20	20	20
Canadian New, per lb.....	16	16		16		20	20
Bread—For 2 lb. loaf per lb.....			04				
For 1½ lb. loaf per lb.....	03½	03½		05½	05½	05½	05½
Flour—Strong bakers, per lb.....	02	02½	3½	04	03½	03½	03½
Rolled Oats—Per lb.....	03	04	04	04	04	04	04
Rice—Good medium, per lb.....	05	05	05	05	06	06	06
Beans—Hand picked, per lb.....	04	04	05	05	05	06	06
Apples—Evaporated per lb.....	10	10	12	14-12		12	12
Prunes—Medium quality, per lb.....		09	10	12	14	12	14
Sugar—Granulated in \$ lots per lb.....	04½	05½	05½	05½	06½	06	05½
Yellow in \$ lots, per lb.....	04	05	05	05	06	05½	05
Tea—Black medium India or Ceylon, per lb.....	25	25	25	35	40	40	40
Green medium Japan, per lb.....	50	50	50	50	50	50	50
Coffee—Medium Mocha per lb.....	20	38	35-40	40	40	40	40
Potatoes—Per bag of 1½ bushel.....	90	1 15	1 00	1 35	1 50	1 60	\$1 00
Vinegar—White Wine XXX. per gallon.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	12	10	10	12	12	12	12
Coal—Anthracite, per ton of 2000 lb.....	7 00	6 25	6 75	7 00	7 75	8 75	8 00
Bituminous, per ton of 2000 lb.....	5 00	4 85	4 25-5 50	5 10	5 10	5 10	5 50
Wood—Hard best, per long cord.....	7 00	8 00	9 00	8 00	8 00	8 00	8 00
Soft per cord.....	3 50	4 00		4 00	4 00	4 00	4 50
Coal Oil—Per gallon.....	25	22	18	20	20	20	22

Note.—1910, to 1913 inclusive....Flour—25 lb. bags, 90cts.

1900 and 1905....Wood—Hard, \$9.00 sawed.

1900 and 1905....Wood—Soft, \$4.00 and \$4.50 Resp. sawed.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900.	1905	1909	1910	1911	1912	1913
<i>New Brunswick—Newcastle.</i>							
Beef—Sirloin steak, best, per lb.....	14	10	12	18	18	.....	20
Medium chuck, per lb.....	10	.....	10	13	13	.....	14
Veal, forequarter, per lb.....	.....	.....	08	08	.....	.....	.....
Mutton, hindquarter, per lb.....	10	.....	12	14	14	.....	11
Pork—Fresh, roasting, per lb.....	10	14	15	16	18	.....	16-18
Salt, per lb.....	10	13	18	17	16	.....	15-18
Bacon, best, smoked, per lb.....	14	16	18	22	20	.....	24
Fish—Fresh, good quality, per lb.....	05	06	08	05	07	.....	03-10
Lard—Pure leaf, per lb.....	12	14	20	19	17	.....	18
Eggs—New laid, per dozen.....	20	25	35	35	35	.....	40
Packed, per dozen.....	.....	.....	30	30	30	.....	35
Milk—Per quart.....	05	06	07	07	07	.....	08
Butter—Dairy, tub, per lb.....	20	25	25	24	28	.....	32
Creamery, prints, per lb.....	.....	.....	30-35	30	35	.....	35
Cheese—Canadian, old, per lb.....	.....	.....	.....	.....	17	.....	20
Canadian, new, per lb.....	14	14	16	16	18	.....	18
Bread—For 1½ lb. loaf, per lb.....	.....	.....	.....	.....	06	.....	.....
For 2 lb. loaf, per lb.....	.....	03½	.....	04	.....	.....	04
For 2½ lb. loaf, per lb.....	.....	.....	03½	.....	.....	.....	.....
Flour—Strong Bakers, per lb.....	02½	02½	03½	04	03	.....	03
Rolled Oats—per lb.....	03½	03½	05	05	05	.....	04
Rice—Good, medium, per lb.....	05	05	05	05	05	.....	05
Beans—Hand picked, per lb.....	04	05	05	05	05	.....	05
Apples—Evaporated, per lb.....	12	08	12	13	17	.....	12
Prunes—Medium quality, per lb.....	10	.....	10-12	10	12	.....	10
Sugar—Granulated, in \$ lots, per lb.....	05	06	05	06	07	.....	05
Yellow, in \$ lots, per lb.....	05	05	05	05	06	.....	05
Tea—Black, medium India or Ceylon, per lb.....	30	25	25-40	30	30	.....	40
Green, medium Japan, per lb.....	.....	.....	25-40	.....	.....	.....	.....
Coffee—Medium Mocha, per lb.....	40	40	40	40	40	.....	40
Potatoes—Per bag of 1½ bushels.....	90	.....	90	80	75	.....	1 10
Vinegar—White Wine XXX, per gallon.....	10	10	10-15	10	10	.....	10
Starch—Laundry, per lb.....	10	10	10	05	10	.....	10
Coal—Anthracite, per ton of 2000 lb.....	.....	.....	7 00	7 00	8 00	.....	7 25
Bituminous, per ton of 2000 lb.....	.....	.....	5 00	5 00	5 25	.....	6 00
Wood—Hard, best, per long cord.....	.....	.....	4 00	4 00	4 00	.....	.....
Soft, per cord.....	50	50	.....	3 50	2 50	.....	.....
Coal oil—Per gallon.....	30	.....	25	25	25	.....	25

NOTE.—1900 and 1905. Fish..Cod.

1913.....Flour.....\$5.75 per brl. of 196 lb.

1900 and 1905. Mill Wood.....50 cts. per load.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>New Brunswick—Fredericton.</i>							
Beef—Sirloin steak, best, per lb.....	14	16			20	25	25
Medium chuck, per lb.....	08	10			12	12	12
Veal, forequarter, per lb.....	05	06			10	08	10
Mutton, hindquarter, per lb.....	10	12			15	14	14
Pork—Fresh, roasting, per lb.....	10	12			14	14	15
Salt, per lb.....	12	12			14	16	18
Bacon, best smoked, per lb.....	14	16			18	24	25
Fish—Fresh, good quality, per lb.....	05-12	05-12			08-16	07-16	08-16
Lard—Pure leaf, per lb.....	15	13			12	20	20
Eggs—New laid, per dozen.....	30	30			40	41	40
Packed, per dozen.....	25	28			35	30	38
Milk—Per quart.....	06	07			07	08	08
Butter—Dairy, tub, per lb.....	20	20			22	26	28
Creamery, prints, per lb.....	24	25			30	35	40
Cheese—Canadian, old, per lb.....	14	16			25	25	25
Canadian, new, per lb.....	12	14			20	20	19
Bread—For 2 lb. loaf, per lb.....	04	04			04	04	04
Flour—Strong Bakers, per lb.....	03	04			04	04	04
Rolled Oats—Per lb.....	03	04			03-04	04	04
Rice—Good, medium, per lb.....	05	05			06	06	06
Beans—Hand picked, per lb.....	04	04½			05	07	06
Apples—Evaporated, per lb.....	09	10			13	12	13
Prunes—Medium quality, per lb.....	09	10			12	12	10
Sugar—Granulated, in \$ lots, per lb.....	05	05			07	06	05
Yellow, in \$ lots, per lb.....	05	05			06½	06	05
Tea—Black, medium, India or Ceylon, per lb.....	30-50	30-50			35	35	35
Green, medium, Japan, per lb.....	40-50	40-50			50	50	50
Coffee—Medium, Mocha, per lb.....	35	35			40	40	40
Potatoes—Per bag of 1½ bushels.....	60	60			2 00	1 50	1 50
Vinegar—White Wine XXX, per gallon.....	10	10			10	10	10
Starch—Laundry, per lb.....	12	12			10	10	10
Coal—Anthracite, per ton of 2000 lbs.....	7 00	7 50			8 00	9 00	8 50
Bituminous, per ton of 2000 lbs.....	5 50	6 00			6 50	6 50	6 50
Wood—Hard, best, per long cord.....	5 00	6 00			6 50	6 50	6 50
Soft, per cord.....	3 00	3 00			4 00	4 00	3 00
Coal oil—Per gallon.....	24	23			20	20	20

NOTE.—1911 prices taken from January 1912.

1900 to 1913, inclusive.....	Fish.....	Halibut.
1911 to 1913, inclusive.....	Fish.....	Cod.
1911 to 1913, inclusive.....	Flour.....	in 25 lb. lots.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<i>New Brunswick.</i>							
Beef—Sirloin, best, per lb.....	14.2	15.2	16.7	19.0	20.0	23.0	22.2
Medium chuck, per lb.....	10.0	11.7	12.3	13.0	12.2	12.7	14.0
Veal, forequarter, per lb.....	7.5	9.0	7.0	9.0	11.0	10.0	12.0
Mutton, hindquarter, per lb.....	10.7	12.0	12.7	14.0	14.0	10.0	14.3
Pork—Fresh, roasting, per lb.....	11.0	13.5	13.7	16.0	15.5	15.3	17.7
Salt, per lb.....	10.5	12.2	14.3	16.3	15.2	15.7	17.0
Bacon, best smoked, per lb.....	15.2	17.2	18.3	21.3	20.7	22.3	24.2
Lard—Pure leaf, per lb.....	13.5	14.2	19.3	19.3	16.2	20.0	19.5
Eggs—New laid, per dozen.....	26.0	28.0	36.6	40.0	40.0	40.8	46.2
Packed, per dozen.....	22.7	25.0	30.7	30.0	32.0	32.3	38.4
Milk—Per quart.....	5.7	6.5	7.0	7.0	7.2	7.8	8.0
Butter—Dairy, tub, per lb.....	20.7	23.0	26.3	24.5	25.6	30.6	30.5
Creamery, prints, per lb.....	25.0	26.3	31.8	29.3	32.5	36.0	44.6
Cheese—Canadian, old, per lb.....	15.0	16.0	17.3	17.0	20.5	21.6	24.5
Canadian, new, per lb.....	14.0	15.0	16.7	16.3	19.5	20.0	18.7
Bread—Per lb.....	3.6	3.6	3.8	4.4	4.8	4.4	4.3
Flour—Strong Bakers, per lb.....	2.6	3.1	3.3	3.8	3.5	4.2	3.5
Rolled Oats—Per lb.....	3.2	3.7	4.3	4.3	4.1	4.0	4.0
Rice—Good, medium, per lb.....	4.7	4.7	5.0	5.0	5.5	5.7	5.2
Beans—Hand picked, per lb.....	4.0	4.6	5.8	5.0	5.0	6.0	6.0
Apples—Evaporated, per lb.....	10.0	9.5	12.0	12.7	14.7	11.3	11.7
Prunes—Medium quality, per lb.....	9.0	9.3	10.3	10.6	13.0	11.3	11.0
Sugar—Granulated, in \$ lots per lb.....	4.8	5.3	5.4	5.8	6.8	5.9	5.1
Yellow, in \$ lots per lb.....	4.6	5.0	5.0	5.0	6.1	5.6	5.0
Tea—Black, medium, India or Ceylon, per lb.....	42.5	31.2	32.5	33.3	35.0	36.7	37.5
Green, medium, Japan, per lb.....	45.0	45.0	42.5	45.0	46.7	46.7	42.5
Coffee—Medium, Mocha, per lb.....	32.5	38.2	39.1	40.0	40.0	40.0	40.0
Potatoes—Per bag of 1½ bushels.....	78.7	80.0	88.3	101.7	128.7	136.7	112.5
Vinegar—White Wine XXX, per gallon.....	9.5	9.5	10.8	10.0	10.0	10.0	10.0
Starch—Laundry, per lb.....	13.0	10.0	10.0	9.0	10.5	10.7	10.5
Coal—Anthracite, per ton of 2000 lb.....	7.10	6.87	7.12	6.83	7.72	8.94	7.94
Bituminous, per ton of 2000 lb.....	5.16	5.36	4.87	5.11	5.53	5.62	5.94
Wood—Hard, best, per long cord.....	5.42	6.16	5.66	5.66	6.00	6.83	6.83
Soft, per cord.....	2.94	3.12	3.42	3.42	3.50	3.83	3.67
Coal oil—Per gallon.....	25.7	22.3	22.0	22.3	21.5	20.0	21.7



## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Quebec.</i>							
Beef—Sirloin steak, best, per lb.....	08 10	10 12	15-18	13-14	14-15	16-17	16-18
Medium chuck, per lb.....	06-08	07-09	14-16	12-14	12-13	14-15	14-16
Veal forequarter, per lb.....			14-16	13-14	10-12	14-15	14-16
Mutton hindquarter, per lb.....	07	05-09	14	13	13	12-14	16-18
Pork—Fresh roasting, per lb.....	09	08	15	15	14	15	18-20
Salt, per lb.....	09-10	10-12	16	16	16	16	19-20
Bacon, best smoked, per lb.....	12	12-15	18-22	18-20	18-20	18-20	20-22
Fish—Fresh, good quality, per lb.....	06	06-08	08-10	08	08	08	08
Lard—Pure leaf, per lb.....	14	15	20	20	20	20	23-25
Eggs—New laid, per dozen.....	30	35	60	50	50	60	60-70
Packed, per dozen.....			30	26-30	30	30	35-40
Milk—Per quart.....	08	08	10	10	10	10	10
Butter—Dairy tub, per lb.....	18	23	28 30	24-27	27	28 30	28 30
Creamery prints, per lb.....	20	26	30-35	26-30	30	35-28	32-34
Cheese—Canadian old, per lb.....			15-18	16	16-18	16 18	20
Canadian new, per lb.....							18
Bread—For 6 lb. loaf, per lb.....	02½	03	03½	03½	03½	03½	03½
Flour—Strong Bakers, per lb.....	02½	03½	04	03	03	03½	03½
Rolled Oats, per lb.....	04	04	05	05	05	05	05
Rice—Good medium, per lb.....	05	05	05-06	05	05	05	05
Beans—Hand picked, per lb.....	04½	05	05	05	05	07	.....
Apples—Evaporated, per lb.....			13	13	13	13	13
Prunes—Medium quality, per lb.....			12	12	12	12	12
Sugar—Granulated in 5 lots, per lb.....	05	04½	05	05	06½	05½	05½
Yellow, in 5 lots, per lb.....	04	04	04½	04½	05½	04½	4½
Tea—Black medium India or Ceylon, per lb.....	35	35	25-30	25-30	35	35-40	35-40
Green Medium Japan, per lb.....	35	35	25-30	25-30	35-40	35-40	35-40
Coffee—Medium Mocha, per lb.....	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.....	50	60	75	90	\$1 20	90-1 00	90-75
Vinegar—White Wine XXX, per gallon.....	15	15	20	20	20	20	15-20
Starch—Laundry, per lb.....	08	08	10	10	10	10	10
Coal—Anthracite per ton of 2,000 lbs.....	6 00	6 50	8 00	7 50	7 75	10 00	8 50
Bituminous per ton of 2,000 lbs.....	5 00	5 50	6 00	5 00	5 00	5 00	5 00
Wood—Hard, best per long cord.....	4 50	5 00	7 00	6 00	6 00	6 00	6 00
Soft per cord.....	2 50	3 00	.....	4 50	4 00	4 50	4 50
Coal Oil—per gallon.....	3 50	4 00	.....	5 50	5 00	5 50	5 50
	18	18	18	18	18	18	20

NOTE—1910 to 1913—Fish—Haddock.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Three Rivers.</i>							
Beef—Sirloin steak, best, per lb.....	12	15	15	18	20	18	18
Medium chuck, per lb.....	08	10	12½	12	12	12	12
Veal forequarter, per lb.....	08	09	12½	15	12	15	12
Mutton hindquarter, per lb.....	08	12	13	15	15	15	15
Pork—Fresh roasting, per lb.....	10	11	17	14	12	17	18
Salt, per lb.....	13	14	18	15	12	15	18
Bacon, best smoked, per lb.....	16	18	20	22	20	20	22
Fish—Fresh good quality, per lb.....	04-10	06-12	08-12	08-12	08-15	08-15	08-20
Lard—Pure leaf, per lb.....	14	15	20	18	15	17	17
Eggs—New laid, per dozen.....	25	30	40	45	45	50	50
Packed, per dozen.....	18	22	30	35	30	35	32
Milk—Per quart.....	06	07	08	08	09	09	08
Butter—Dairy tub, per lb.....	24	25	28	27	32	33	30
Creamery prints, per lb.....	25	26	28	28	33	35	32
Cheese—Canadian old, per lb.....	14	15	17	20	18	20	20
Canadian new, per lb.....	14	15	.....	18	17	20	20
Bread—For 2 lb. loaf, per lb.....	.....	03	.....	.....	.....	.....	04
For 3 lb loaf, per lb.....	.....	.....	.....	.....	.....	.....	.....
For 6 lb. loaf, per lb.....	02½	.....	03½	03	03½	05	.....
Flour—Strong Bakers, per lb.....	02½	02½	04	03	03	03	03
Rolled Oats—per lb.....	04	04	05	04	04	04	04
Rice—Good medium, per lb.....	04	04	04	04	04	05	05
Beans—Hand Picked, per lb.....	03½	04	05	04	05	06	06
Apples—Evaporated, per lb.....	12	12	12	12	12	12	12
Prunes—Medium quality, per lb.....	12	12	12	12	12	12	12
Sugar—Granulated in 5 lots, per lb.....	05	05½	05½	05½	06½	06½	06
Yellow, in 5 lots, per lb.....	04	05	05	05	05½	06	05
Tea—Black medium India or Ceylon, per lb.....	30-50	30-50	30-50	30-50	30-50	30-50	30-50
Green medium Japan, per lb.....	25-50	25-50	30-50	25-50	25-50	25-50	25-50
Coffee—Medium Mocha, per lb.....	30-40	30-40	40	30-40	30-40	30-40	30-40
Potatoes—Per bag of 1½ bushels.....	60	75	75	1 00	1 25	80	96
Vinegar—White Wine XXX, per gallon.....	15	15	15	15	15	15	15
Starch—Laundry, per lb.....	08	08	08	08	08	08	08
Coal—Anthracite per ton of 2,000 lb.....	6 50	6 50	7 50	7 25	7 00	7 50	7 25
Bituminous per ton of 2,000 lb.....	4 50	4 50	5 00	5 00	5 00	5 00	5 00
Wood—Hard, best, per long cord.....	5 00	6 00	6 50	6 50	6 50	6 50	7 00
Soft, per cord.....	3 00	3 50	.....	4 00	4 00	4 00	4 00
Coal oil—Per gallon.....	18	18	20	18	18	18	20

NOTE—1910 to 1913—Fish—Haddock.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Sherbrooke.</i>							
Beef—Sirloin steak, best, per lb.	10-12	10-12	18	20	20	22	20
Medium chuck, per lb.	10	10	16	12½	12½	15	16
Veal, forequarter, per lb.	08	08	04	10	10	10	16
Mutton, hind quarter, per lb.	12	12	10-11	15	15	18	16
Pork—Fresh roasting, per lb.	10	10	16	13 14	13 14	17	18
Salt, per lb.	10	10	15	14	16	17	17-18
Bacon, best smoked, per lb.	12	12	20-22	20	20	18	23
Fish—Fresh, good quality, per lb.			10-15	10-12	08-10	10-12	06
Lard—Pure leaf, per lb.	10	10	14-16	30	18	18	18
Eggs—New laid, per dozen.			45-60	50	50-60	50-60	50-60
Packed, per dozen.			35	35	35 40	40	40-45
Milk—Per quart.			07	07	07	07	08
Butter—Dairy tub, per lb.			25	23-24	30	35	32
Creamery prints, per lb.			38	28-30	34	37	37
Cheese—Canadian old, per lb.			14-16	16-18	18	20	20
Canadian new, per lb.					18		
Bread—For 1 lb loaf, per lb.			05	05	05	05	05
Flour—Strong Bakers, per lb.			04	03½	03½	03½	03½
Rolled Oats—Per lb.			04	04	05	05	05
Rice—Good medium, per lb.			05-06	05	06	05	06
Beans—Hand picked, per lb.	05	05	05	05	06	06	06
Apples—Evaporated, per lb.	07	07	12½	12½	17	12½	10
Prunes—Medium quality, per lb.	07½	07½	12½	12½	15	13	12½
Sugar—Granulated, in \$ lots, per lb.	05	05	05	05½	06½	05½	05
Yellow, in \$ lots, per lb.	04½	04½	04	05	06½	05	04½
Tea—Black medium India or Ceylon, per lb.	30-35	30-35	25-40	40	40	40	40
Green medium Japan, per lb.	30-35	30-35	25 35	40	40	40	40
Coffee—Medium Mocha, per lb.	31-35	30-35	40	40	40	40-45	40
Potatoes—Per bag of 1½ bushels.			50-60	1 05	1 35	1 30	90
Vinegar White Wine XXX, per quart.			10	10	10	10	10
Starch—Laundry, per lb.			08	08	08	08	09
Coal—Anthracite, per ton of 2,000 lb.			7 25	7 50	7 50	8 50	8 00
Bituminous, per ton of 2,000 lb.			4 25	4 75	6 00	6 00	6 00
			5 00				
Wood—Hard, best, per long cord.			4 00	5 00	5 00	5 00	7 50
			5 00				
Soft, per cord.				4 00	4 50	4 50	.....
Coal Oil—Per gallon.			25	28	20	20	17

Note.—1910.....Granulated sugar—10 lb. per \$.  
 1911.....Granulated sugar—17 and 16 lb. per \$.  
 1911 to 1913.....Flour—90 and 85 cts. per 25lb. bag.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Sor l.</i>							
Beef—Sirloin steak, best, per lb.	10	12		15	12	18	20
Medium chuck, per lb.	08	09		10	10	12½	12-13
Veal, forequarter, per lb.	08	09					12
Mutton, hindquarter, per lb.	10	12		15	12	15	20
Pork—Fresh roasting, per lb.	11	12		12	13	15	18-20
Salt, per lb.	11	11		15	12	16	18
Bacon, best smoked, per lb.	15	17		20	18	20	25
Fish—Fresh, good quality, per lb.	05		25	22-08	08	10	10-12
Lard—Pure leaf, per lb.	12	13		18	15	18	20
Eggs—New laid, per dozen	30	35		40	45	45	50
Packed, per dozen	20	23		30	30	35	35
Milk—Per quart	06	07		08	08	08	08
Butter—Dairy tub, per lb.	23	24		27	32	30	28
Creamery prints, per lb.	25	26		28		33	37
Cheese—Canadian old, per lb.	18	18		14	17	20	20
Canadian new, per lb.	16	16				18	18
Bread—For 6 lb. loaf, per lb.	02½	02		03	03	03	
Flour—Strong bakers, per lb.	02½	02		03	03	03	03
Rolled Oats—Per lb.	03	04		03½	03½	04	04
Rice—Good medium, per lb.	04	04		05	05	05	04
Beans—Hand picked, per lb.	03½	04		05	06	06	05
Apples—Evaporated, per lb.	07½	10		10	15	13	12
Prunes—Medium quality, per lb.	07½	10		10	10	10	12
Sugar—Granulated, in \$ lots, per lb.	05½	05		05	06½	05½	05½
Yellow, in \$ lots, per lb.	05	04½		04½	06	05	05
Tea—Black medium India or Ceylon, per lb.	30	30		30	30-40	30	30
Green medium Japan, per lb.	30	30		30	30-40	30	30
Coffee—Medium Mocha, per lb.	40	40		40	40	40	40
Potatoes—Per bag of 1½ bushels.	60	75		1 00	1 35	75	90
Vinegar—White Wine XXX, per gallon.	10	10		10	10	10	10
Starch—Laundry, per lb.	08	08		08	08	08	08
Coal—Anthracite, per ton of 2,000 lb.	5 50	6 25		6 75	6 75	8 00	7 75
Bituminous per ton of 2,000 lb.	4 00	5 00		5 00	4 75	5 00	5 50
Wood—Hard best, per long cord	5 00	5 00		6 25	6 25	7 00	7 00
Soft, per cord	3 50	3 50		5 00	4 50	5 00	6 00
Coal Oil—Per gallon	20	18		16	17	18	20

Note.—1910.....Fish—Salmon.



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—St. Hyacinthe.</i>							
Beef—Sirloin steak, best, per lb.	08	09	10-12	12	12	12	17
Medium chuck, per lb.	05	07	10	10	10	08	12
Veal, forequarter per lb.	05	06	10	10	10	10	15
Mutton hindquarters, per lb.	06	07	12-13	12	12	15	15
Pork—Fresh roasting, per lb.	08	08	15	12	11	16	17
Salt per lb.	08	08	15-18	14	10	15	15
Bacon, best smoked, per lb.	10	12	20	22	20	25	28
Fish—Fresh, good quality, per lb.	03-05	05-07	12-15	12-15	06	06	06
Lard—Pure leaf, per lb.	10	12	16	12	15	18	18
Eggs—New laid, per dozen.	13	15	40	40	40	35	50
Packed, per dozen.	12	13	35	35			40
Milk—Per quart.	04	05	07	07	06	07	08
Butter—Dairy tub, per lb.	25	25	26-27	28	30	34	
Creamery prints, per lb.			26-27	30	30	34	32
Cheese—Canadian, old, per lb.	15	15	15	18	18	20	18
Canadian new per lb.	15	15		17	18	20	18
Bread—For 6 lb. loaf, per lb.	03½	03½	03	03	02½	03	02½
Flour—Strong bakers, per lb.	03	03	03	03	03	03	03
Rolled Oats—Per lb.	05	05	04	04	05	05	05
Rice—Good medium, per lb.	04-05	04 05	05	04-05	04-05	04-05	04-05
Beans—Hand picked, per lb.	03	04	04	05	05	06	06
Apples—Evaporated, per lb.	10	10	12	12	12	12	12
Fruit—Medium quality, per lb.	11	11	15	12	13	13	13
Sugar—Granulated, in 5 lots, per lb.	05	05	05	05½	06½	06	05
Yellow, in 5 lots, per lb.	04	04	04½	05	06	05	04½
Tea—Black medium India or Ceylon, per lb.	30-60	30-60	30-50	30-60	30-60	30-60	30-60
Green medium Japan, per lb.	30-60	30-60	30-50	25-60	30-60	30-60	30-60
Coffee—Medium Mocha per lb.	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.	38	38	75	1 00	1 20	75	90
Vinegar—White Wine XXX, per gallon.	05-07	05-07	05-07	05 07	05 07	05-07	05-07
Starch—Laundry, per lb.	08	08	08	08	08	08	08
Coal—Anthracite, per ton of 2,000 lb.	5 75	6 00					
Bituminous, per ton of 2,000 lb.	6 00	6 50	7 25	7 50	6 75	10 50	8 50
Wood—Hard best, per long cord.	4 50	5 00	5 25	5 50	5 00	7 00	5 50
Soft, per cord.	4 50	5 50	7 00	7 00	7 00	8 00	8 00
Coal Oil—Per gallon.	2 50			4 00	4 00	6 00	6 00
	3 00	4 00		4 50	5 00	6 50	6 50
	15	15	20	20	18	18	18

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—St. Johns.</i>							
Beef—Sirloin steak best, per lb.....	12	15	18	18	18 20	20	20
Medium chuck, per lb.....	08-10	12	12	15	15-18	16	16
Veal, forequarter, per lb.....	06-10	12	18	.....	15	16	16
Mutton, hindquarter, per lb.....	08-10	18	18	20	18 20	18	18
Pork—Fresh roasting, per lb.....	10	12	16	14	14-15	18	18
Salt, per lb.....	10	12	16	15	12	16	16
Bacon, best smoked, per lb.....	14	18	20	20-22	18-20	20	20
Fish—Fresh, good quality, per lb.....	06-08	10	08	12-15	08 10	10-12	10-12
Lard—Pure leaf, per lb.....	12	15	20	20	15-18	18	18
Eggs—New laid, per dozen.....	25	23	40	40	45	45	40
Packed, per dozen.....	23	20	32	.....	.....	40	38
Milk—Per quart.....	05	06	08	08	07	09	09
Butter—Dairy tub, per lb.....	23	28	26	26	28	36	34
Creamery prints, per lb.....	25	30	28	28	31	38	36
Cheese—Canadian Old per lb.....	18	20	18	18	19	20	19
Canadian new, per lb.....	15	15	.....	16	17	18	17
Bread—For 2 lb loaf, per lb.....	.....	.....	.....	.....	.....	03½	03½
1 For 3 lb. loaf, per lb.....	03½	03½	.....	.....	.....	.....	.....
For 6 lb. loaf, per lb.....	.....	.....	03½	05	05	.....	.....
Four—Strong bakers, per lb.....	02½	02½	03½	03	03	03½	03½
Rolled Oats—Per lb.....	03	04½	04½	04	05	06	06
Rice—Good medium, per lb.....	04½	05	06	05-06	05-06	05-06	05-06
Beans—Hand picked, per lb.....	03½	05	05	05	05	05	05
Apples—Evaporated, per lb.....	10	10	13	12	12	13	13
Prunes—Medium quality per lb.....	10	10	15	12	10	13	13
Sugar—Granulated, in \$ lots per lb.....	05	05½	06	05½	07	06	05½
Yellow in \$ lots, per lb.....	04½	05	05	05	05	05½	05
Tea—Black medium India or Japan, per lb.....	30	30-40	30	35	35	30	30
Green medium Japan, per lb.....	35	50	40	40	40	35	35
Coffee—Medium Mocha, per lb.....	35	40	35	40	40	30	30
Potatoes—Per bag of 1½ bushel.....	60	75	60	1.00	1.25	1.10	90
Vinegar—White Wine XXX, per quart.....	08	10	10	10	10	15	15
Starch—Laundry, per lb.....	08	08	08	10	10	10	10
Coal—Anthracite, per ton of 2000 lb.....	6 50	7 00	6 00	6 50	6 50	8 25	7.75
Bituminous, per ton of 2000 lb.....	4 50	5 00	5 00	5 00	5 00	6 50	5.50
Wood—Hard best, per long cord.....	5 00	6 00	7 50	8 00	8 00	6 50	6.50
Soft, per cord.....	3 00	4 00	.....	6 00	6 00	5 00	5.00
Coal Oil—Per gallon.....	15	18	22	20	20	22	22

Note—1912 & 1913....Flour—90 and 85 cents per 25 lb. bag.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Montreal.</i>							
Beef—Sirloin steak, best, per lb.	15-20 1	7-22	15	16	16	20	18-28
Medium chuck, per lb.	09-12 1/2	10 13	15	14	10-14	15	10-15
Veal, forequarter, per lb.	07-08	07-09	09	09	12 1/2	18	08-15
Mutton, hindquarter, per lb.	12-14	15-17	15	12	07-13	16	15-22
Pork—Fresh roasting, per lb.	12-14	14-16	15-16	12	12	14	16-23
Salt, per lb.	10-12	12-14	15	14	12	18	18-20
Bacon, best smoked, per lb.	14-16	18-20	17-19	18	16	22	23-25
Fish—Fresh good quality, per lb.	12	15	22	20	14	15	20
Lard—Pure leaf, per lb.	15	18	18	20	20	17	20
Eggs—New laid, per doz.	40	53	35	40	32	60	75
“ Packed, per dozen.	22	26	28	28	26	35	38
Milk—Per quart.	07	08	08	08	08	09	10
Butter—Dairy tub, per lb.	20	26	28	26	28	33	28
“ Creamery prints, per lb.	25	30	30	28	33	36	32 1/2
Cheese—Canadian Old, per lb.	16	18	16-17	18	18	22	20
“ Canadian New, per lb.	14	16		16	20	20	18
Bread—For 1 1/4 lb. loaf, per lb.							04 1/2
For 1 1/2 lb. loaf, per lb.	04 1/2	05 1/2					
For 3 lb. loaf, per lb.			04 1/2	04 1/2	04 1/2	04 1/2	
Flour—Strong bakers, per lb.	03 1/2	03 1/2	03 1/2	04	03 1/2	04	03 1/2
Rolled Oats—Per lb.	05	05	04	04	04	04	05
Rice—Good medium, per lb.	06	06	05	04	05-06	07	06
Beans—Hand picked, per lb.	05	05	08	10	05	06	05
Apples—Evaporated, per lb.	10	10	12	12	10	13	15
Prunes—Medium quality, per lb.	10	10	10	10	10	12 1/2	15
Sugar—Granulated in 5 lots per lb.	04	05	05 1/2	05	07	05 1/2	05
“ Yellow in 5 lots, per lb.	04	05	04 1/2	04 1/2	06	06	05
Tea—Black medium India or Japan, per lb.	30-40	30-40	25-30	30	25-40	35	30-40
“ Green Medium Japan per lb.	50	50	25-35	25	25-40	35	50
Coffee—Medium Mocha, per lb.	30-40	30-40	30	30	25-40	60	30-40
Potatoes—Per bag of 1 1/2 bushel.	65	75	70	90	1.25	1.25	1.00
Vinegar—White wine XXX, per quart.	12	12	20	20	15	18	15
Starch—Laundry, per lb.	06	06	07	10	08	07	08
Coal—Anthracite, per ton of 2000 lb.	\$7 00	7 75	7 50	7 00	7 75	8 50-	8 25
“ Bituminous, per ton of 2000 lb.	6 00	6 00	4 00	4 50	7 00	6 50	6 50
Wood—Hard best, per long cord.	7 00	7 50	8 00	8 00	8 00	8 35	9 00
“ Soft, per cord.	4 00	4 50		6 50	6 00	4 85	5 06
Coal Oil—Per gallon.	20-25	22 27	28	18	18 20	23	25-30

Note—1911 and 1913—Flour . . . 90 and 85 cts per 25 lb. bag.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec—Hull.</i>							
Beef—Sirloin steak, best per lb.....	10	12½	12-15	14	15	18	18-20
Medium chuck, per lb.....	10	10-12½	12-15	12	12½	13	15
Veal, forequarter, per lb.....	08	08	12-15	.....	12½	12	12½
Mutton, hindquarter, per lb.....	10	10	12-15	10	12½	17	15
Pork—Fresh roasting, per lb.....	12	12½	15-18	16-17	14	16	18-20
Salt, per lb.....	10	12	15	12½	12	15-16	18
Bacon best smoked, per lb.....	12	14	25	20	20	20	21
Fish—Fresh good quality, per lb.....	05-12	06-13	06-12½	08-12	08-12	08	08 15
Lard—Pure leaf, per lb.....	12	12	15-20	18	13	15-18	18
Eggs—New laid, per dozen.....	25	25	35	40	50	45	45-50
Packed, per dozen.....	20	20	28	28	30	35	38
Milk—Per quart.....	06	06	08	08	08	09	09
Butter—Dairy tub, per lb.....	23	23	27-30	26	32	33	28-30
Creamery prints, per lb.....	25	25	30	28	34	35	32
Cheese—Canadian Old, per lb.....	13	13	15	16	18	18-20	18-20
Canadian New, per lb.....	12	12	.....	20	17	17	17
Bread—For 3 lb. loaf, per lb.....	.....	.....	.....	.....	.....	03½	03½
For 4 lb. loaf, per lb.....	02½	02½	.....	.....	.....	.....	.....
For 6 lb. loaf, per lb.....	.....	.....	03½	03½	03½	.....	.....
Flour—Strong bakers, per lb.....	02½	02½	02- <sup>n</sup> / <sub>10</sub>	02½	04	03	03
Rolled Oats—Per lb.....	04	04	03	02½	04	05	05
Rice—Good medium, per lb.....	04	03½	04	04	05	05	05
Beans—Hand picked, per lb.....	03½	03½	04	04	05	07	06
Apples—Evaporated, per lb.....	10	10	12	12	14	12½	12
Prunes—Medium quality, per lb.....	10	10	09	07	10 12½	12½	12
Sugar—Granulated in \$ lots per lb.....	3½-04	04	06	05½	06½	05½	05-06½
Yellow in \$ lots, per lb.....	03½-04	04	05	05	06	05	4½-05
Tea—Black medium India or Ceylon, per lb.....	25	25	40	40	40	35-40	35-40
Green medium Japan, per lb.....	25	25	40	40	40	35	35
Coffee—Medium Mocha, per lb.....	35	35	40	40	40	40	40
Potatoes—Per bag of 1½ bushel.....	70	70	45	1.00	1.40	1.00	1.10
Vinegar—White Wine XXX, per quart.....	06	06	10	10	10	10	10
Starch—Laundry, per lb.....	08	08	08	08	08	08	08
Coal—Anthracite, per ton of 2000 lbs.....	6 50	7 25	7 50	7 50	7 50	8 00	8 00
Bituminous, per ton of 2000 lbs.....	3 00	5 00	4 00	5 50	5 50	5 50	3 75
Wood—Hard best, per long cord.....	4 50	4 00	6 00	5 50	5 50	6 00	6 00
Soft, per cord.....	2 50	2 00	.....	3 50	3 50	4 50	4 50
Coal Oil—Per gallon.....	20	20	18 20	18	20	20	20

Note—1910—Flour....\$2.70 per 100 lb.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<i>Quebec.</i>							
Beef—Sirloin steak, best, per lb.....	11.1	13.1	15.3	15.8	16.0	18.0	19.2
Medium Chuck, per lb.....	8.5	9.9	13.4	12.3	12.2	13.3	13.8
Veal forequarter, per lb.....	7.6	8.6	13.4	11.5	11.4	13.6	13.7
Mutton hindquarter, per lb.....	9.4	11.9	13.8	14.0	13.9	16.6	16.8
Pork—Fresh, roasting, per lb.....	10.6	11.0	15.8	13.6	13.0	16.0	18.4
Salt, per lb.....	10.3	11.3	15.8	14.4	12.7	16.0	17.6
Bacon, best smoked, per lb.....	13.2	15.4	20.6	20.2	19.0	20.5	23.0
Lard—Pure Leaf, per lb.....	12.4	13.7	18.1	18.2	16.6	17.8	19.1
Eggs—New laid, per dozen.....	27.2	31.6	43.2	41.6	44.6	49.4	54.0
Packed, per dozen.....	20.0	22.0	31.1	31.2	30.6	36.4	37.6
Milk—Per quart.....	6.0	6.6	6.8	8.0	7.8	8.5	8.7
Butter—Dairy tub, per lb.....	22.1	24.8	27.3	26.1	29.9	32.9	30.8
Creamery prints, per lb.....	24.7	27.5	29.7	28.4	32.1	35.6	33.9
Cheese—Canadian old, per lb.....	15.4	16.2	16.6	17.2	17.9	19.8	19.5
Canadian new, per lb.....	14.3	14.9	15.8	16.6	17.5	18.6	18.2
Bread—Per lb.....	3.3	3.5	3.8	3.8	3.8	3.8	4.1
Flour—Strong Baker, per lb.....	2.6	2.8	3.5	3.1	3.2	3.3	3.2
Rolled Oats—Per lb.....	4.0	4.3	4.2	3.9	4.4	4.7	4.9
Rice—Good Medium, per lb.....	4.6	4.6	5.0	4.6	5.0	5.2	5.1
Beans—Hand picked, per lb.....	3.9	4.4	5.1	5.3	5.1	4.5	4.8
Apples—Evaporated, per lb.....	9.5	9.8	12.3	11.9	13.1	12.6	12.4
Prunes—Medium quality, per lb.....	9.7	10.0	12.2	10.9	11.6	12.2	12.7
Sugar—Granulated in \$ lots, per lb.....	4.7	4.9	5.4	5.3	6.2	5.8	4.6
Yellow, in \$ lots, per lb.....	4.2	4.5	4.6	4.8	5.8	5.2	4.8
Tea—Black Medium India or Ceylon, per lb.....	34.0	34.7	33.9	35.9	38.4	36.9	36.9
Green Medium Japan, per lb.....	36.2	33.1	35.3	35.3	42.5	36.2	38.7
Coffee—Medium Mocha, per lb.....	36.6	36.8	37.5	38.1	38.4	40.9	37.5
Potatoes—Per bag of 1½ bushels.....	57.8	67.9	65.0	98.1	129.6	98.7	93.4
Vinegar—White Wine XXX, per quart.....	10.3	10.5	13.0	12.6	12.0	13.0	12.3
Starch—Laundry, per lb.....	7.7	8.6	8.1	8.7	8.5	7.4	8.6
Coal—Anthracite, per ton of 2000 lb.....	6.27	6.81	7.28	7.19	7.20	8.95	8.03
Bituminous, per ton of 2000 lb.....	4.50	5.06	4.74	5.03	5.47	5.84	5.40
Wood—Hard best, per long cord.....	5.06	5.50	6.64	6.46	6.53	7.57	7.15
Soft, per cord.....	3.21	3.62	4.81	4.81	5.22	4.88	5.10
Coal Oil—Per gallon.....	19.2	19.5	20.2	18.9	18.7	19.6	20.5



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Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Ottawa.</i>							
Beef—Sirloin steak, best, per lb.	15	18	15	17½-20	20	18-20	25
Medium chuck, per lb.	07	08	10-15	12½-14	10-12½	12½	15
Veal forequarter, per lb.	08	08	10	12½-18	10-12	12½	
Mutton hindquarter, per lb.	07	09	15	15	15	15	22
Pork—Fresh roasting, per lb.	10	09	12	15	15	15-12½	20
Salt, per lb.	10	12	15	15	12½	12½	20
Bacon, best smoked, per lb.	15	18	20-22	19-20	18	20	25
Fish—Fresh, good quality, per lb.	06	06	18-20	15	15	08	18-20
Lard—Pure Leaf, per lb.	10	12½	19	17-19	15	20	20
Eggs—New laid, per dozen	20	24	50-60	50-60	40-50	50	60
Packed, per dozen			30	30	25-30	32	38
Milk—Per quart	06	07	08	08	08	09	09
Butter—Dairy tub, per lb.	20	24	25	26	30	32-28	30
Creamery prints, per lb.	22	26	28	30-32	32	34-35	32
Cheese—Canadian old, per lb.	17½	15	15-18	18	22	20	20
Canadian new, per lb.	12½	13		15	18	18	18
Bread—For 1 lb. loaf, per lb.			05				
For 1½ lb. loaf, per lb.	05	05					04
For 3 lb. loaf, per lb.				03½	03½	03½	
Flour—Strong Bakers, per lb.	02-6	02½	03	03	04	04	03½
Rolled Oats—Per lb.	02½	02½	03½	04	04	05	04
Rice—Good Medium, per lb.	04	05	05	04½	05	05	05
Beans—Hand picked, per lb.	03	04	05	05	05	06	06
Apples—Evaporated, per lb.	10	09	12½	10	12½	12½	10
Prunes—Medium quality, per lb.	09	10	10	15	15	15	10
Sugar—Granulated in 5 lots, per lb.	04½	04½	05	05½	06½	06	05
Yellow in 5 lots, per lb.	04	04	04½	05	06	05½	05
Tea—Black Medium, India or Ceylon, per lb.	30-50	30-50	20-25	30	30	40	40
Green Medium, Japan, per lb.	25	25	20-25	30	30	35	40
Coffee—Medium Mocha, per lb.	35-40	35-40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels	60	80	55	1 10	1 75	1 00	1 25
Vinegar—White Wine XXX, per quart	10	10	10	10	10	10	10
Starch—Laundry, per lb.	06	07	07½	08	08	08	08
Coal—Anthracite, per ton, of 2000 lb.	7.50	7.50	7 50	7.50	7 50	8.00	8.00
Bituminous, per ton of 2000 lb.	5.00	5.00	5.50	5.50	5 50	5.50	5.50
Wood—Hard, best, per long cord	4.00	4.50	6-6.50	6.50	7 00	7.50	6.50
Soft, per cord	2.50	3.00		3.75	3 50	4.50	4.50
Coal Oil—Per gallon.	25	25	20	20	25	20	25

NOTE:—1912.....Fish.....Haddock.  
 1913.....Flour.....85 and 90 cts. per 25 lb. bag.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Brockville.</i>							
Beef—Sirloin steak, best, per lb.....	12½	15			22	20-25	24-25
Medium chuck, per lb.....	10	12½			15	15-18	16-18
Veal forequarter, per lb.....	08	10			12½	12½	15
Mutton hindquarter, per lb.....	10	12			15	15	16
Pork—Fresh, roasting, per lb.....	10	11			15	16-20	20-24
Salt, per lb.....	08	10			15	17	18
Bacon, best smoked, per lb.....	14	15			19	22-25	25
Fish—Fresh, good quality, per lb.....	08-10	08-12			15	10-20	10-20
Lard—Pure Leaf, per lb.....	10	11			10-16	18	18-20
Eggs—New laid, per dozen.....	25	30			40	40-45	50
Packed, per dozen.....	20	24			32	33	40
Milk—Per quart.....	05	05			06	07	08
Butter—Dairy tub, per lb.....	22	32			33	32-30	33
Creamery prints, per lb.....	23	33			36	33-35	33
Cheese—Canadian old, per lb.....	11	12½			18	18-20	18-20
Canadian new, per lb.....	11	12½			17	18-20	18-20
Bread—For 1½ lb. loaf, per lb.....	03½	03½			04	03½	03½
Flour—Strong Bakers, per lb.....	03	03			03½	03	03
Rolled Oats—Per lb.....	03	03			04	03½	04
Rice—Good medium, per lb.....	05	05			05	05	05
Beans—Hand picked, per lb.....	02½	03			05	07½	05
Apples—Evaporated, per lb.....	06	08			12½	15	10
Prunes—Medium quality, per lb.....	08	10			10	10-18	10
Sugar—Granulated in \$ lots, per lb.....	05	05			06½	06	05
Yellow in \$ lots, per lb.....	04½	04½			6½	05	04½
Tea—Black Medium, India or Ceylon, per lb.....	30	30			30	40	40
Green Medium, Japan, per lb.....	30	30			40	35	35
Coffee—Medium Mocha, per lb.....	35	35			35	40	40
Potatoes—Per bag of 1½ bushels.....	75	90			1,50	1,25	1,20
Vinegar—White Wine XXX, per quart.....	05	06			09	09	09
Starch—Laundry, per lb.....	06	06			08	08	08
Coal—Anthracite, per ton of 2000 lb.....	6,00	6,50			7,00	7,50	7,50
Bituminous, per ton of 2000 lb.....	4,00	4,50				5,00	5,00
Wood—Hard best, per long cord.....	4,00	4,50			5,00	6,00	6,50
Soft, per cord.....	3,00	3,50			4,00	4,50	5,00
Coal oil—Per gallon.....	15	18			20	20	20

NOTE:—1911.....Sirloin Steak.....Taken from January 1912.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Kingston.</i>							
Beef—Sirloin steak, best per lb.....	10-12	10-12	12½	.....	20	20	20
Medium chuck, per lb.....	08	08	10	13	15	15	15
Veal, forequarter, per lb.....	07	07	08	10	10	10	10
Mutton, hindquarter, per lb.....	10	10	10	15	15	15	15
Pork—Fresh roasting, per lb.....	10	10	15	15-18	15	17	20
Salt, per lb.....	08 10	08-10	15	16	18	15	15
Bacon, best smoked, per lb.....	12	16	20	20	23	20-22	20-22
Fish—Fresh, good quality, per lb.....	.....	.....	12½	12½	12½	12½	12½
Lard—Pure Leaf, per lb.....	13	14	18	18	18	17	17
Eggs—New laid, per dozen.....	25	28	45	34	50	35	45-50
Packed, per dozen.....	22	22	28	27	30	.....	.....
Milk—per quart.....	05	05	06	06	06	07	07
Butter—Dairy tub, per lb.....	20	20	23	.....	25	.....	.....
Creamery prints, per lb.....	22	25	28	29	30	35	30-35
Cheese—Canadian old, per lb.....	14	19	15-20	16	15	20	20
Canadian new, per lb.....	12	15	.....	13	13	18	18
Bread—For 2 lb. loaf, per lb.....	02½	02½	.....	.....	.....	.....	.....
For 3 lb. loaf, per lb.....	.....	.....	03½	03½	04	04	04
Flour—Strong Bakers, per lb.....	02	03	03	03½	03	03½	03½
Rolled Oats—per lb.....	04	04	04	05	05	05	05
Rice—Good Medium, per lb.....	05	05	05	05	05	05	05
Beans—Hand picked, per lb.....	05	05	05	05	05	05	06
Apples—Evaporated, per lb.....	10	10	09	10-12	20	12½	12½
Prunes—Medium quality, per lb.....	07	07	10	13	13	12½	12½
Sugar—Granulated in \$ lots, per lb.....	04½	05	06	06½	06½	06½	06½
Yellow in \$ lots, per lb.....	04	04	05	05	05	05½	05½
Tea—Black Medium India or Ceylon, per lb.....	25-30	25-30	30	35	35	35	35
Green Medium, Japan, per lb.....	25-30	25-30	25	35	35	35	35
Coffee—Medium Mocha, per lb.....	30	30	30	30-40	30-40	40	40
Potatoes—Per bag of 1½ bushels.....	75	1,00	40	85	1,50	90	1,10
Vinegar—White Wine XXX, per gallon.....	10	10	10	10-13	10	10	10
Starch—Laundry, per lb.....	07	07	08	08-10	08	08	08
Coal—Anthracite, per ton of 2,000 lb.....	5,50	6,50	7,00	7,00	7,00	7 75	7,75
Bituminous, per ton of 2,000 lb.....	4,50	5,00	5,00	6,25	6,25	5 50	5,50
Wood—Hard, best, per long cord.....	5,00	7,00	8,00	7,00	7,00	7 00	7,00
Soft, per cord.....	3,50	4,50	.....	4,50	4,50	5 00	5,00
Coal Oil—Per gallon.....	20	20	15	18-20	15	15	15

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Belleville.</i>							
Beef—Sirloin steak best, per lb.....	12½	12½	18	17	17	20	20
Medium chuck, per lb.....	15	15	08-10	10	12½	12½	14
Veal, forequarter, per lb.....	10	10	10	12½	12½	15	.....
Mutton hindquarter, per lb.....	12½	12½	10-15	15	13-15	15-17	20
Pork—Fresh roasting, per lb.....	12½	12½	15	14	15	.....	17
Salt, per lb.....	12	12	12	14	15	.....	.....
Bacon, best smoked, per lb.....	18-20	20	24	22	22	27	28
Fish—Fresh, good quality, per lb.....	.....	.....	10-12	12	12½	.....	.....
Lard—Pure Leaf, per lb.....	12½	14	18	20	15	19	18
Eggs—New laid, per dozen.....	20-22	25	35	40	50	40	45
Packed, per dozen.....	16	23	28	28	32	35	38
Milk—per quart.....	05	05-06	06	07	07	06-07	07
Butter—Dairy tub, per lb.....	25	25-28	24	27	30	35	30
Creamery prints, per lb.....	28	27-28	25	30	34	35	33
Cheese—Canadian old, per lb.....	15	15	16-18	18	20	20	20
Canadian new, per lb.....	13-14	14	.....	16	17	18	18
Bread—for 3 lb. loaf, per lb.....	03½	03½	03½	03½	03½	03½	03½
Flour—Strong Bakers, per lb.....	2-6	02½	03	03½	03	02½	02½
Rolled Oats—per lb.....	02½	03	04	03½	04	04	04
Rice—Good medium, per lb.....	05	05	05	05	05	05	05-06
Beans—Hand picked, per lb.....	05	.....	05	05	05	08	07
Apples—Evaporated, per lb.....	.....	10	10	10	12½	.....	.....
Prunes—Medium quality, per lb.....	.....	08½	10	10	10	12½	10
Sugar—Granulated, in \$ lots, per lb.....	05	05	05½	06½	06½	06½	05½
Yellow, in \$ lots, per lb.....	04½	04½	05	05½	05½	05½	05
Tea—Black Medium, India or Ceylon, per lb.....	25-40	25-40	30	30	40	30-60	30-60
Green Medium, Japan, per lb.....	25-40	25-40	30	30	30	30-60	30-60
Coffee—Medium Mocha, per lb.....	30-40	30-40	30	40	40	30-40	30-40
Potatoes, per bag of 1½ bushels.....	1,00	1,00	50	90	1,75	1,50	1,40
Vinegar—White Wine XXX, per quart.....	1,05	1,05	.....	.....	2,00	.....	.....
Starch—Laundry, per lb.....	10	10	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.....	08	08	08-10	10	10	10	08
Bituminous, per ton of 2,000 lb.....	6,50	6,75	6,75	7,00	7,25	8,50	7,75
Wood—Hard best, per long cord.....	7,00	5,00	5,00	5,00	5,75	5,00	.....
Soft, per cord.....	5,50	7,50	6,00	6,50	7,00	6,50	6,00
Coal oil—per gallon.....	4,00	5,00	.....	4,50	5,00	4,50	5,00
	5,00	.....	25	20	.....	5,00	6,00
	15	15	25	20	.....	20	20

NOTE.—1910 to 1913.....Flour.....70 to 80 cts. for 25lb. bag.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Peterborough.</i>							
Beef—Sirloin steak best, per lb.....	12½	12½	15	20	18	20	25
Medium chuck, per lb.....	10	10	10	12	12½	12½	16
Veal, forequarter, per lb.....	10	10	10	12½	12½	12½	16
Mutton, hindquarter, per lb.....	12½	12½	10	18	15	18	22
Pork—Fresh roasting, per lb.....	10	12	15	18	16	16	20
Salt, per lb.....	09	10	18	17	12½	15	17
Bacon, best smoked, per lb.....	13	15	20	23	20	25	26
Fish—Fresh, good quality, per lb.....	10	10	12½	15	15	15	18
Lard—Pure Leaf, per lb.....	15	18	20	20	18	20	20
Eggs—New laid, per dozen.....	25	25	34	35	38	40	45
Packed, per dozen.....	20	20	30	30	36	30	40
Milk—Per quart.....	05	06	06	07	07	07	07
Butter—Dairy tub, per lb.....	20	20	20	25	30	28	30
Creamery prints, per lb.....	25	25	30	30	32	33	32
Cheese—Canadian, old, per lb.....	17	18	18	20	22	20	20
Canadian, new, per lb.....	15	16	10	17	20	18	18
Bread—For 1½ lb. loaf, per lb.....						08½	08½
For 2 lb. loaf, per lb.....	02½	02½	05	05	05		
Flour—Strong Bakers, per lb.....	02½	02½	02½	03	02½	03½	02½
Rolled Oats—Per lb.....	03	05	03½	03½	03	04½	04½
Rice—Good medium, per lb.....	05	05	05	05	05	05	05
Beans—Hand picked, per lb.....	05	05	05	05	05	07	07
Apples—Evaporated, per lb.....	09	10	12½	12½	15	15	12½
Prunes—Medium quality, per lb.....	10	10	08½	12½	15	15	12½
Sugar—Granulated in 5 lots, per lb.....	05	05	06	05½	06½	05½	05
Yellow in 5 lots, per lb.....	05	04½	05	05	06½	05	04½
Tea—Black Medium, India or Ceylon, per lb.....	35	35	40	40	40	40	40
Green Medium, Japan, per lb.....	25	25	40	40	40	40	40
Coffee—Medium Mocha, per lb.....	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.....	75	75	60	80	1,45	1,10	1,20
Vinegar—White Wine XXX, per quart.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	08	10	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lbs.....			7,50	7,50	7,50	8,25	8,25
Bituminous, per ton of 2,000 lbs.....			5,60	5,50	5,50	5,50	5,50
Wood—Hard best, per long cord.....	5,00	5,00	7,00	5,50	6,00	7,00	6,50
Soft, per cord.....	2,50	2,75		3,00	3,50	3,50	3,00
Coal oil—Per gallon.....	20	20	20	20	20	20	20

NOTE.—1911.....Bread.....Doubtful.  
 1912 and 1913.....Flour.....at 70 to 80 cents for 25 lb. bag.



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Orillia.</i>							
Beef—Sirloin steak, best, per lb.....	12½	15	.....	.....	20	20	23-25
Medium chuck, per lb.....	08	10	.....	.....	14	14-15	17
Veal, forequarter, per lb.....	10	10	.....	.....	12½-15	15-18	15-18
Mutton, hindquarter, per lb.....	10	12	.....	.....	15	15	15
Pork—Fresh roasting, per lb.....	12½	12½	.....	.....	15	16	18
Salt, per lb.....	12	12	.....	.....	15	.....	.....
Bacon best smoked, per lb.....	14	18	.....	.....	22	23	28
Fish—Fresh good quality, per lb.....	10	.....	.....	.....	12	12½	14
Lard—Pure Leaf, per lb.....	13	15	.....	.....	16	18	20
Eggs—New laid, per dozen.....	22	27	.....	.....	35	33	45
Packed, per dozen.....	18	25	.....	.....	30	28	388
Milk—Per quart.....	05	05	.....	.....	07	07	08
Butter—Dairy tub, per lb.....	19	24	.....	.....	27	28	25
Creamery prints, per lb.....	22	26	.....	.....	35	35	30
Cheese—Canadian old, per lb.....	16	.....	.....	.....	.....	18	28
Canadian new, per lb.....	14	.....	.....	.....	17	.....	13
Bread—For 3 lb. loaf, per lb.....	03½	03½	.....	.....	03½	03½	02½
Flour—Strong Bakers, per lb.....	02	02½	.....	.....	03	03	03½
Rolled Oats—Per lb.....	02½	02½	.....	.....	03½	03½	05½
Rice—Good medium, per lb.....	08	08	.....	.....	05	05	05
Beans—Hand picked, per lb.....	.....	.....	.....	.....	05	06	02
Apples—Evaporated, per lb.....	.....	.....	.....	.....	12½	12	12
Prunes—Medium quality, per lb.....	.....	10	.....	.....	10-15	10	15½
Sugar—Granulated, in \$ lots, per lb.....	05	06½	.....	.....	07	05½	05½
Yellow, in \$ lots, per lb.....	04½	05½	.....	.....	06	08	00½
Tea—Black medium, India or Ceylon, per lb.....	25	25	.....	.....	25	30	30
Green medium, Japan, per lb.....	25	25	.....	.....	25	30	30
Coffee—Medium Mocha, per lb.....	40	40	.....	.....	25-40	40	40
Potatoes—Per bag of 1½ bushels.....	70-75	40-45	.....	.....	1 50	90	1 20
Vinegar—White Wine XXX, per quart.....	10	10	.....	.....	10	10	17
Starch—Laundry, per lb.....	07	05-06	.....	.....	07	07	00
Coal—Anthracite, per ton of 2,000 lb.....	.....	7 25	.....	.....	7 50	8 75	7 70
Bituminous, per ton of 2,000 lb.....	.....	5 25	.....	.....	5 50	6 00	6 00
Wood—Hard best, per (long) ton.....	5 00	4 75	.....	.....	6 00	7 50	6 75
Soft, per ton.....	3 50	2 50	.....	.....	3 50	5 50	4 5
Coal oil—Per gallon.....	15-20	.....	.....	.....	25	15-20	15-20

Note.—Sirloin steak.....1911 is 1912 prices.  
 1913.....Flour.....70 and 80 cts for 25 lb. bag.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Toronto.</i>							
Beef—Sirloin steak, best, per lb.....	12½-14	16	18-20	20-22	18-20	20-25½	5-30
Medium chuck, per lb.....	10	14	08	7½-09½	10-12	12½-13	16-18
Veal, forequarter, per lb.....	08-09	11-12	08	6½-08½	10	12½-13	16-18
Mutton, hindquarter, per lb.....	09-10	11-12	15	10-12	12½-13	15-18	19-21
Pork—Fresh, roasting, per lb.....	10-13	14	20	16-18	16-18	18-22	18-22
Salt, per lb.....	08	10	17	14-16	12-13	12-14	12-14
Bacon, best, smoked, per lb.....	10-14	14-16	22	20-22	20-22	20-24	22-25
Fish—Fresh, good quality, per lb.....	05-08	08-10	12½-15	15	12½	15	22-18
Lard—Pure leaf, per lb.....	13	11	18	17	15	18	18
Eggs—New laid, per dozen.....	22	26	45-50	55-60	60	50	50-55
Packed, per dozen.....	18	21	28	30-35	30	40-35	30-32
Milk—Per quart.....			08	09	10	10	10
Butter—Dairy, tub, per lb.....	22	23	24	30-27	25-27	32-35	28-32
Creamery, prints, per lb.....	25	27	33	32-33	32-35	33-37	32-35
Cheese—Canadian, old, per lb.....	14	15	15-16	17-18	20	20	20
Canadian, new, per lb.....	13	13		15-16	18	17	17
Bread—For 3 lb. loaf, per lb.....	03½	03½	03	03½	03½	03½	03½
Flour—Strong Bakers, per lb.....	02½	03	03	03	03	02½	02½
Rolled Oats—Per lb.....	03	03½	04	02½	02½	02½	02½
Rice—Good, medium, per lb.....	05	05	05	04	04½	05	05
Beans—Hand picked, per lb.....	04	04	05	05	05	06	05
Apples—Evaporated, per lb.....	09	10	08	10		10	10
Prunes—Medium quality, per lb.....	08-10	09-12½	07	10		10	12
Sugar—Granulated, in \$ lots, per lb.....	05	05½	05	05	05½	05	05
Yellow, in \$ lots, per lb.....	04½	05	04½	05	05½	05	5½
Tea—Black, medium, India or Ceylon, per lb.....	20-30	25-30	25-30	25-35	25-35	25-35	25-35
Green, medium, Japan, per lb.....	25-35	25-35	25-35	25-35	25-40	25-40	35-40
Coffee—Medium, Mocha, per lb.....	30-40	30-40	25-25	25-40	25-40	25-40	25-40
Potatoes—Per bag of 1½ bushels.....					1.35	1.20	1.10
	75	75	70	1.00	1.45	1.30	1.20
Vinegar—White Wine XXX, per gallon.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	07	07	07	07	07	07	07
Coal—Anthracite, per ton of 2000 lbs.....	6.00	7.00	7.25	7.00	7.25	8.25	8.25
			6.00				
Bituminous, per ton of 2000 lbs.....	4.50	5.50	7.50	5.50	5.00	5.50	5.50
Wood—Hard, best, per long cord.....	6.00	7.50	7.50	8.00	8.50	8.50	8.50
			8.00				
Soft, per cord.....	5.00	6.50		5.00	5.50	5.50	5.50
Coal oil—Per gallon.....			18	18	18	23-25	20-23

NOTE.—1912 and 1913 ..... Flour.....\$2.75 and \$2.65 for 98 lb. bag.  
 1910.....Rolled Oats.....90 lb. bags.....\$2.25.  
 1911 and 1913 Rolled Oats.....90 lb. bags.....\$2.30.  
 1912.....Rolled Oats.....90 lb. bags.....\$2.60.  
 1911.....Granulated Sugar.....16 lb. for \$1.00.  
 1911.....Yellow Sugar.....17 lb. for \$1.00.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Niagara Falls.</i>							
Beef—Sirloin steak, best, per lb.....	15	18	18	18	20	23	23
Medium chuck, per lb.....	09	12	10	10	12½	15	15
Veal, forequarter, per lb.....	10	12	12	15	15	15	20
Mutton, hindquarter, per lb.....	12	14	17	20	18	20	23
Pork—Fresh, roasting, per lb.....	13	10	18	20	18	20	25
Salt, per lb.....			16	16	16	16	18
Bacon, best, smoked, per lb.....	18	22	22	25-28	22-25	25	28
Fish—Fresh, good quality, per lb.....	10		15	12	15	15	18
Lard—Pure leaf, per lb.....	13	15	19	20	20	20	20
Eggs—new laid, per dozen.....	25	30	40	45	40	45	45
Packed, per dozen.....	20	25	31	35	35	35	.....
Milk—Per quart.....	05	06	07	07	08	08	08
Butter—Dairy, tub, per lb.....			28	30	31	32	30
Creamery, prints, per lb.....	25	30	31	32	33	37	35
Cheese—Canadian, old, per lb.....	20	20	16	17	20	25	22
Canadian, new, per lb.....	15	18		16	17	18	20
Bread—For 1½ lb. loaf, per lb.....				04	04	04	04
For 2½ lb. loaf, per lb.....			03½				
Flour—Strong Bakers, per lb.....	02½	02½	03½	03½	02½	03	02½
Rolled Oats—Per lb.....	03½	03½	05	05	05	04	04
Rice—Good, medium, per lb.....	05	05	05	05	05	05	05
Beans—Hand picked, per lb.....	04	05	08	08	05	09	07
Apples—Evaporated, per lb.....	10	12½	07		12½		.....
Prunes—Medium quality, per lb.....	10	10	10	10	10	10	13
Sugar—Granulated, in \$ lots, per lb.....	05½	05½	05½	05½	06½	06½	05½
Yellow, in \$ lots, per lb.....	05	05	04½	05	05½	06	05
Tea—Black, medium, India or Ceylon, per lb.....	25	25	30	30-50	30 50	30-50	30-50
Green, medium, Japan, per lb.....	25	25	30	30-50	30-50	30-50	30-50
Coffee—Medium Mocha, per lb.....	25	25	35	40	40	28	28
Potatoes—Per bag of 1½ bushels.....	75	1.00	90	90	1.65	1.35	1.35
Vinegar—White Wine XXX, per gallon.....	12½	12½	10	10	10	10	13
Starch—Laundry, per lb.....	08	10	08	08	08	08	10
Coal—Anthracite, per ton of 2000 lb.....	5.50	6.25	6.25	6.00	6.25	7.00	6.75
Bituminous, per ton of 2000 lb.....	4.00	4.00	4.00	4.00	4.50	5.00	5.00
Wood—Hard, best, per long cord.....			6.00	7.00	7.00	7.00	7.00
Soft, per cord.....				5.00	5.00	5.00	5.00
Coal oil—Per gallon.....	20	20	20	20	20	20	18

NOTE.—1912 and 1913.....Flour.....70 and 80 cts. per 25 lb. bags.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—St. Catharines.</i>							
Beef—Sirloin steak, best, per lb.			18	18	18	22	24-26
Medium chuck, per lb.			08-10	12½	12½	18	18-20
Veal, forequarter, per lb.			15	15	12½-15	20	22-24
Mutton, hindquarter, per lb.			15	15	15	20-22	22-24
Pork—Fresh, roasting, per lb.			15-18	16-18	17	18	18
Salt, per lb.			15	15-18	13	16	16
Bacon, best, smoked, per lb.			20	24-28	20-22	22	24
Fish—Fresh, good quality, per lb.			15	12½-15	13-15	10	15
Lard—Pure leaf, per lb.			18	18	15	20	20
Eggs—New laid, per dozen.			40	40	40-45	40	42-45
Packed, per dozen			30	34	35	32	30-32
Milk—Per quart.			07	07	07	08	08
Butter—Dairy, tub, per lb.			25	27	28	26-28	28
Creamery, prints, per lb.			32-34	30	34	38	32-35
Cheese—Canadian, old, per lb.			16	18	20	22	22
Canadian, new, per lb.				15	18	18	18
Bread—For 2½ lb. loaf, per lb.			03½				
For 3 lb. loaf, per lb.				04	04	04	04
Flour—Strong Bakers, per lb.			02½	03	03	03	03
Rolled Oats—Per lb.			04	03½	03½	04	03
Rice—Good, medium, per lb.			07	05	05	05	05
Beans—Hand picked, per lb.			05	05	05	07-08	07
Apples—Evaporated, per lb.						10	
Prunes—Medium quality, per lb.			10	10	10	12-15	12-15
Sugar—Granulated, in \$ lots, per lb.			06	07	07	05½	05½
Yellow, in \$ lots, per lb.			05	06	06½	05½	06½
Tea—Black, medium, India or Ceylon, per lb.			40	40	40	30	30
Green, medium, Japan, per lb.			40	40	40	30	30
Coffee—Medium Mocha, per lb.			25	30	30	40-45	40-45
Potatoes—Per bag of 2½ bushels.						1.30	1.20
			80	75	1.70	1.50	1.30
Vinegar—White Wine XXX, per gallon.			10	10	10	10	10
Starch—Laundry, per lb.			08	08	08	07-10	07-10
Coal—Anthracite, per ton of 2000 lb.						7.50	
			7.00	6.75	7.00	7.75	7.75
Bituminous, per ton of 2000 lb.						4.75	4.75
						5.00	5.00
Wood—Hard, best, per long cord.			8.00	8.00	8.00	8.50	8.50
Soft, per cord.				5.00	5.00		
				6.00	6.00	7.50	7.50
Coal Oil—Per gallon.			17	17	17	20	20

Note.—1910 to 1913 Flour.....from 70 to 80 cts. per 25 lb bag.  
 1912.....Granulated Sugar.....16 to 18 lbs. per \$1.00.  
 1913.....Granulated Sugar.....21 and 19 lbs. per \$1.00.  
 1912.....Yellow Sugar.....16 to 18 lb. per \$1.00.  
 1913.....Yellow Sugar.....21 and 19 lbs. per \$1.00.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Hamilton.</i>							
Beef—Sirloin steak best, per lb.	09-10	11-12	15	17-19	18-20	18	22
Medium chuck, per lb.	08	08	12½	11-14	10-12	12½	13-15
Veal, forequarter, per lb.	07	09	11	14-18	15	15	15-18
Mutton, hindquarter, per lb.	08	09-10	10	12 18	18 20	18-20	18-20
Pork—Fresh roasting, per lb.	08-10	10-12	18	18	15	19	22
Salt, per lb.	08	10	16	18	15-16	16	22
Bacon, best smoked, per lb.	09-10	12	23	25	18	22	23
Fish—Fresh, good quality, per lb.	10	12	12½	10½-20	15	15	15
Lard—Pure Leaf, per lb.	10-11	12	18	18	15	18	18
Eggs—New laid, per dozen.	23-25	22-24	45	42-45	45-55	45-50	50-60
Packed, per dozen.	17-20	17-20	30	30-32	32-35	32-25	35-40
Milk—Per quart.	06	07	07	07	08	08	08
Butter—Dairy tub, per lb.	23-24	24	30	30	27	30-32	30-33
Creamery prints, per lb.	26-28	26-28	35	33	35	33-35	33-35
Cheese—Canadian Old, per lb.	12½	12½	18	20	20	20	20-22
Canadian New, per lb.	12½	12½	—	15	20	18-20	18-20
Bread—For 2 lb. loaf, per lb.	02½	02½	—	—	—	—	—
For 1½ lb. loaf, per lb.	—	—	—	03½	03½	03½	03½
For 1¼ lb. loaf, per lb.	—	—	04	—	—	—	—
Flour—Strong Bakers, per lb.	03	03	03	03	03	03	03
Rolled Oats—Per lb.	04	04	04	04	04	04	04
Rice—Good Medium, per lb.	05	05	05	05	50	05	05
Beans—Hand picked, per lb.	03½	03½	05	05	05	05½	05½
Apples—Evaporated, per lb.	09	09	05	—	12	12	12
Prunes—Medium quality, per lb.	10	10	09	101	0-12 1	3-15	13-15
Sugar—Granulated, in \$ lots, per lb.	05	05	05	05½	07-06½	6½-07	05
Yellow, in \$ lots, per lb.	04½	04½	05	05½	06½	06½	04½
Tea—Black medium India or Ceylon, per lb.	25-60	25-60	40	35-40	25-40	25-40	25-40
Green medium Japan, per lb.	25-60	25-60	40	35-40	25-40	25-40	25-40
Coffee—Medium Mocha, per lb.	25-40	25-40	40	40	30 40	30-40	30-40
Potatoes—Per bag of 1½ bushels.	65-70	75	75	90	1.60	1.10	1.10
Vinegar—White wine XXX, per gallon.	10	10	08	08	10	10	10
Starch—Laundry, per lb.	06	06	08	08	08	08	08
Coal—Anthracite, per ton of 2,000 lb.	5.50	6.75	6.75	6.75	7 00	8.00	7.50
Bituminous, per ton of 2,000 lb.	4.00	5 00	5 50	5 50	5 75	6 00	6 00
Wood—Hard, best, per long cord.	8.00	8 00	7 00	7 00	8 00	9 00	10 00
Soft, per cord.	7.00	7 00	—	5 50	6 00	7 00	8 00
Coal Oil—Per gallon.	14	14-15	18	18	18	18	18

NOTE.—1910 to 1913, Flour, 70 to 80 cts. per 25 lb bag.



## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Brantford.</i>							
Beef—Sirloin steak, best, per lb.	13	15	18	20	20	20	25
Medium chuck, per lb.	10	10	10	12	12	12½	14
Veal, forequarter, per lb.	10	08	10	—	—	15	15
Mutton hindquarter, per lb.	12½	15	15	18	15	20	22
Pork—Fresh, roasting, per lb.	10	15	17	15	15	20	20
Salt, per lb.	10	13	16	15	15	—	20
Bacon, best smoked, per lb.	12½	15	24	22	22	20	25
Fish—Fresh good quality, per lb.	10	12½	12½	13	13	15	15
Lard—Pure Leaf, per lb.	13	15	18	20	17	18	18
Eggs—New laid, per dozen.	20	25	40	40	40	45	20
Packed, per dozen.	—	18	30	32	30	35	—
Milk—Per quart.	05	05	06	06	08	07	07
Butter—Dairy tub, per lb.	20	18	—	—	—	—	30
Creamery prints, per lb.	25	25	28	28	35	35	35
Cheese—Canadian Old, per lb.	12½	14	17	18	22	20	20
Canadian New, per lb.	10	12	—	—	18	18	18
Bread—For 2 lb. loaf, per lb.	05	—	—	—	—	—	—
For 1½ lb. loaf, per lb.	—	05	3½	3½	3½	03½	05
Flour—Strong Bakers, per lb.	2-8	03	03	03	03-03½	03-03½	03
Rolled Oats—Per lb.	03	03	05	05	05	05	04½
Rice—Good medium, per lb.	05	05	07	07	07	05	06
Beans—Hand picked, per lb.	03	04	04	05	05	07	05
Apples—Evaporated, per lb.	—	—	—	—	—	—	—
Prunes—Medium quality, per lb.	10	10	08	08	12½	12½	12½
Sugar—Granulated, in \$ lots, per lb.	05	05½	05½	05-19½	-07½	06½	05½
Yellow, in \$ lots, per lb.	04½	05	05	05½	06½	5½	05
Tea—Black medium India or Ceylon, per lb.	25-50	25-50	25	25-40	25-40	40	30
Green medium Japan, per lb.	25	25	25	25-40	25-40	25	25
Coffee—Medium Mocha, per lb.	30	30	35	35	35	40	40
Potatoes—Per bag of 1½ bushels.	75	85	75	80	1.50	1.25	1.00
Vinegar—White wine XXX, per quart.	10	10	10	10	10	10	10
Starch—Laundry, per lb.	08	08	09	09	09	08	08
Coal—Anthracite, per ton of 2,000 lb.	6 00	6 75	7 00	7 25	7 25	8 00	8 00
Bituminous, per ton of 2,000 lb.	5 00	5 00	3 50	5 00	5 00	5 75	6 00
Wood—Hard, best, per long cord.	6 00	6 75	8 00	8 00	8 00	8 00	7 00
Soft, per cord.	4 50	5 50	—	5 00	5 00	6 50	5 00
Coal Oil—Per Gallon.	16	18	16	16	16	16	20

NOTE.—1910 to 1912, Fish, White and Salmon. 1910 and 1911, Flour, 70 and 80 cts. per 25 lb. bag.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Guelph.</i>							
Beef—Sirloin steak, per lb.	15	18	18	20	20	20	25
Medium chuck, per lb.	10	12½	11	14	12½	14-15	16-18
Veal, forequarter, per lb.	11	12½	10	14	13	17-18	22-25
Mutton, hindquarter, per lb.	12½	15	12½	18	16	16	19
Pork—Fresh, roasting, per lb.	10	12½	17	18	15-17	18	22
Salt, per lb.	08	10	15	18	18	16-18	16 18
Bacon, best smoked, per lb.	13	17	22	23	22	20	25
Fish—Fresh, good quality, per lb.	10	12½	15	12½	15	15	17
Lard—Pure leaf, per lb.	12	14	19	17-19	17	20	20
Eggs—New laid, per dozen.	18	18	32	35	38	40-45	47
Packed, per dozen.	13	13	28	28 30	30	—	35
Milk—Per quart.	05	05	06	07	07	07	07
Butter—Dairy tub, per lb.	16	20	22	27	32	31	30
Creamery prints, per lb.	20	24	30	29	25	34	34
Cheese—Canadian Old, per lb.	14	15	17	20	20	20	20
Canadian New, per lb.	12	12½	—	15-17	17	20	20
Bread—For 2½ lb. loaf, per lb.			04				
For 3 lb. loaf, per lb.	03½	03½		04	04	04	04
Flour—Strong Bakers, per lb.	02	02½	03	02½	03	03	03
Rolled Oats—Per lb.	03	04	03½	04	04	04	04
Rice—Good medium, per lb.	05	05	05	05	05	05	05
Beans—Handpicked, per lb.	05	05	05	05	05	05	07
Apples—Evaporated, per lb.	04	04	08	10	—	—	—
Prunes—Medium quality, per lb.	10	10	10	10	12½	12½	12½
Sugar—Granulated, in \$ lots, per lb.	06	05	05½	06	07	07	06.
Yellow, in \$ lots, per lb.	05	04	05	05½	06	06	05½
Tea—Black Medium India or Ceylon, per lb.	25-40	25-40	25-50	25-50	25-40	25-40	25-40
Green, Medium Japan, per lb.	25-40	25-40	25-40	25-50	25-40	25 40	25-40
Coffee, Medium Mocha, per lb.	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.	75	60	70	60	1.40	1.25	1.10
Vinegar—White Wine XXX, per quart.	10	10	10	10	10	10	10
Starch—Laundry, per lb.	08	08	08	08	08	08	08
Coal—Anthracite, per ton of 2,000 lb.	5 75	7 00	7 00	7 00	7 25	8 00	7 50
Bituminous, per ton of 2,000 lb.	4 00	5 00	5 00	5 50	5 00	5 50	5 50
Wood—Hard, best, per long cord.	5 00	8 00	8 75	8 00	8 00	8 00	8 50
Soft, per cord.	3 50	5 00	—	5 50	5 00	5 00	5 50
Coal oil—Per gallon.	23	22	20	18	18	18	18

NOTE.—1911 to 1913, flour, 70 and 80 cts per 25lb. bag.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Berlin.</i>							
Beef—Sirloin steak, best, per lb.....	12½	15	15	18	18	20	25
Medium chuck, per lb.....	10	12½	10	12½	13	15	20
Veal forequarter, per lb.....	10	12½	12½	15	15	15	20
Mutton hindquarter, per lb.....	10	12½	18	18	15	18	18
Pork—Fresh roasting, per lb.....	10	12½	18	18	18	18	21
Salt, per lb.....	12	12½	18	18	—	17	17
Bacon, best smoked, per lb.....	15	18	20	25	20	23	25
Fish—Fresh, good quality, per lb.....	—	—	12	10	10	15	18
Lard—Pure Leaf, per lb.....	—	—	20	18	15	18	19
Eggs—New laid, per dozen.....	—	—	35	35	40	40-42	38
Packed, per dozen.....	—	—	30	30	30	35	36
Milk—Per Quart.....	05	05	06	06	07	07	08
Butter—Dairy, tub, per lb.....	—	—	28	27	31	33	30
Creamery prints, per lb.....	16-18	20	30	30	35	38	32
Cheese—Canadian Old, per lb.....	14	15	18	18	20	20	20
Canadian New, per lb.....	12½	13	—	17	18	—	18
Bread—For 1½ lb. loaf, per lb.....	—	04	—	04	04	04	04
For 2 lb. loaf, per lb.....	02½	—	—	—	—	—	—
For 3 lb loaf, per lb.....	—	—	03½	—	—	—	—
Flour—Strong Bakers, per lb.....	02½	02½	03	03	03	03	03
Rolled Oats—Per lb.....	04	—	04½	04	05	04½	04½
Rice—Good medium, per lb.....	05	05	05	05	05	05-10	05-10
Beans—Hand picked, per lb.....	03	—	05	05	05	08-10	08-10
Apples—Evaporated, per lb.....	—	—	07	—	—	15	07
Prunes, medium quality, per lb.....	08½	—	08½	10	15	12-15	07-15
Sugar—Granulated, in \$ lots, per lb.....	05½	—	06	05½	06½	04½	05
Yellow, in \$ lots, per lb.....	05	—	05	05	06½	04½	04½
Tea—Black medium India or Ceylon, per lb.....	40	40	30	30	40	25-50	25-50
Green medium Japan, per lb.....	40	40	30	30	40	30-40	30-40
Coffee—Medium Mocha, per lb.....	12½	—	20	30	40	25-40	25-40
Potatoes—Per bag of 1½ bushels.....	75	—	80	75	1.50	1.20	1.15
Vinegar—White wine XXX, per gallon.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	08	08	10	08	08	08-10	08-10
Coal—Anthracite, per ton of 2,000 lb.....	6 00	7 00	7 25	7 25	7 50	8 00	8 00
Bituminous, per ton of 2,000 lb.....	5 00	5 00	4 50	5 00	5 00	6 00	6 00
Wood—Hard, best, per long cord.....	6 00	8 00	8 00	8 00	8 00	8 50	9 00
Soft, per cord.....	4 50	6 50	—	5 00	5 00	5 50	6 00
Coal Oil—Per gallon.....	20	—	20	20	20	22	22

NOTE.—1910 to 1913, Flour, 70 to 80 cts per 25lb. bag. 1912, Granulated sugar, 16 & 18 lbs. per \$1.00.

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Woodstock.</i>							
Beef—Sirloin steak, best, per lb.	12½	15	18	18	20	22	22
Medium chuck, per lb.	10	15	10	12½	13-14	13-14	13-14
Veal, forequarter, per lb.	10	12½	10	11	13½-15	12½-15	15
Mutton, hindquarter, per lb.	12½	15	13	13	15	15	18
Pork—Fresh roasting, per lb.	10	12½	15-18	18	18	20	20
Salt, per lb.	10	12½	13-16	18	18	20	20
Bacon, best smoked, per lb.	17	18	20-22	25	22	23-25	25
Fish—Fresh, good quality, per lb.			07-13	10 13	06-12	08-14	10-15
Lard—Pure leaf, per lb.	13	13	20	20	15	18	18
Eggs—New laid, per dozen.	20-22	25-27	30-35	35	40	38	45
Packed, per dozen.			28-30	30	30-32	32	
Milk—Per quart.	05	06	06	06	07	07	07
Butter—Dairy tub, per lb.	20	25	25-28	25	30	30	32
Creamery prints, per lb.	22	27	30	30	35	35	34
Cheese—Canadian old, per lb.	15	18	17-20	20	20	25	20-25
Canadian, new, per lb.	13	16		15	17	20	18
Bread—For 1½ lb. loaf, per lb.			04				
For 1½ lb. loaf, per lb.					04		
For 1½ lb. loaf, per lb.	03½	03½		04		04	04
Flour—Strong Bakers, per lb.	02	02½	03	02½	02½	02½	02½
Rolled Oats—Per lb.	03½	03½	03½	03	03½	03½	03½
Rice—Good medium, per lb.	05	05	05	04	04½	05	05
Beans—Hand picked, per lb.	05	05	05	05	05	07	05
Apples—Evaporated, per lb.			10	10			10
Prunes—Medium quality, per lb.	07	08½	08	10	12½	10	12½
Sugar—Granulated, in \$ lots, per lb.	06½	05½	05½	05½	06½	05½	05½
Yellow, in \$ lots, per lb.	06	05½	04½	05	06½	05½	05½
Tea—Black medium India or Ceylon, per lb.	25	25	25	25	25	25	25
Green medium Japan, per lb.	25	25	25	25	25	25	25
Coffee—Medium Mocha, per lb.	30	30	25	25	25	30	30
Potatoes—Per bag of 1½ bushels.	1 00	1 00	85	60	1 50	1 00	1 20
Vinegar—White wine XXX, per quart.	10	10	10	10	10	10	10
Starch—Laundry, per lb.	10	10	08-10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.	6 75	7 00	7 00	7 00	7 25	8 00	7 50
Bituminous, per ton of 2,000 lb.	5 00	5 00	3 75 4 00	4 50	4 25	5 00	5 00
Wood—Hard best, per long cord.	7 00	8 00	7 50	7 50	8 00	8 50	8 50
Soft, per cord.	4 00	5 00	8 00			4 00	4 00
Coal oil—Per gallon.			18	6 00	6 00	6 00	6 00

NOTE.—1910 to 1913..... Fish—Herring.  
 1910 to 1913..... Fish—White fish.  
 1910 to 1913..... Flour—\$2.65 per cwt.  
 1912..... Flour—\$2.75 per cwt.  
 1913..... Flour—\$2.60 per cwt.  
 1911..... Granulated sugar—14 and 16 lbs., \$1.00.  
 1912..... Granulated sugar—16 and 18 lbs., \$1.00.  
 1913..... Granulated sugar—17 and 19 lbs., \$1.00.  
 1911..... Yellow sugar—14 and 16 lbs., \$1.00.  
 1912..... Yellow sugar—16 and 18 lbs., \$1.00.  
 1913..... Yellow sugar—17 and 19 lbs., \$1.00.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Stratford.</i>							
Beef—Sirloin steak, best, per lb.	12½	15	18	18	18	20	20½
Medium chuck, per lb.	08	10	12½	15	15	16	15
Veal, forequarter, per lb.	08	10	12½	13	13	14	14-16½
Mutton, hindquarter per lb.	16	12½	14	16-18	16-18	16-18	16-18
Pork—Fresh roasting, per lb.	12	14	15	22	22	22	22
Salt, per lb.	10	12	15	20	20	20	20
Bacon, best smoked, per lb.	12½	16	22	25	25	24	27
Fish—Fresh, good quality, per lb.	10	12½	12½	12½	12½	15	15
Lard—Pure leaf, per lb.	12½	14	18	18	16	18	18
Eggs—New laid, per dozen.	18	20	32	30	32	40	43
Packed, per dozen.	15	16	29	30	28	33	38
Milk—Per quart.	05	06	06	06	07	07	07
Butter—Dairy tub, per lb.	18	23	25	25	28	28	27
Creamery prints, per lb.		25	27	26	30	30	31
Cheese—Canadian old, per lb.	17	17	17	17	17	20	18
Canadian new, per lb.	15	15		15	17	20	18
Bread—For 1½ lb. loaf, per lb.			04				
For 1½ lb. loaf, per lb.		03½		03½	03½	03½	03½
For 2 lb. loaf, per lb.	03						
Flour—Strong bakers, per lb.	02	02½	02½	03	03	03	03
Rolled Oats—Per lb.	03	03	05	04	04	04	04
Rice—Good medium, per lb.	05	05	05	05	05	05	05
Beans—Hand picked, per lb.	04	04	05	05	05	05	05
Apples—Evaporated, per lb.	10	10	10	08	08		10
Prunes—Medium quality, per lb.	09	09	10	10	12	12	08
Sugar—Granulated, in 5 lots, per lb.	06½	06½	06	06½	07	07	07
Yellow, in 5 lots, per lb.	05	05	05	05½	05½	05½	05½
Tea—Black medium India or Ceylon, per lb.	25	25-40	25	25	30	25-30	30
Green medium Japan, per lb.	25	25-40	25	25-30	30	30	30
Coffee—Medium Mocha, per lb.	25-40	25-40	30	30	30	30	30-40
Potatoes—Per bag of 1½ bushels.	90	1 00	75	60-75	1 00	1 25	1 25
					1 10	1 50	
Vinegar—White wine XXX, per quart.	10	10	10	10	10	10	10
Starch Laundry, per lb.	06	06	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.	6 00	7 00	7 00	7 00	7 00	8 00	7 75
Bituminous, per ton of 2,000 lb.	6 00	7 00	6 00	6 00	7 00	8 00	7 75
Wood—Hard best, per long cord.	4 00	5 00	8 50	8 50	8 50	8 50	8 50
Soft, per cord.	3 00	3 50		7 00	7 00	7 00	7 00
Coal oil—per gallon.	18	18	18	18	18	18	18



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—London.</i>							
Beef—Sirloin steak, best, per lb.	12½	15	18	18	18	22	25
Medium chuck, per lb.	08	10	12	12	12	15	17
Veal, forequarter, per lb.	08	12	15	15	15	17	18
Mutton, hindquarter, per lb.	08	15	15	15	15	15	20
Pork—Fresh roasting, per lb.	10	15	18	15	15	18	20
Salt, per lb.	10	15	18	18	20	18	20
Bacon, best smoked, per lb.	13	17	22	20	20	23	26
Fish—Fresh, good quality, per lb.	10	13	15-18	15	15	18	18
Lard—Pure leaf, per lb.	13	13	19	18	15	18	18
Eggs—New laid, per dozen.	22	28	28	35	40	45	50
Packed, per dozen.	18	24	25	30	30	30	40
Milk—Per quart.	05	05	06	06	06	07	07
Butter—Dairy tub, per lb.	22	25	27	24	28	30	30
Creamery prints, per lb.	25	27	30	30	33	34	33
Cheese—Canadian old, per lb.	14	17	16	20	20	20	22
Canadian new, per lb.	12	15	.....	16	18	18	19
Bread—For 1½ lb. loaf, per lb.	.....	.....	.....	04	.....	04	04
For 1½ lb. loaf, per lb.	.....	02½	03½	.....	3½	.....	.....
For 2 lb. loaf, per lb.	02½	.....	.....	.....	.....	.....	.....
Flour—Strong Bakers, per lb.	02	02½	03½	03	03	03	03
Rolled Oats—Per lb.	02½	04	05	05	05	05	05
Rice—Good medium, per lb.	05	05	07	05	05	05	05
Beans—Hand picked, per lb.	04	05	05	05	05	07	06
Apples—Evaporated, per lb.	05	.....	09	13	.....	.....	.....
Prunes—Medium quality, per lb.	10	10	10	12	15	12	13
Sugar—Granulated, in 5 lots, per lb.	05	05½	06	05½	06½	5½/7	05½
Yellow, in 5 lots, per lb.	04½/1	05	05	05	5½/7	05½	05
Tea—Black medium India or Ceylon, per lb.	25	25	30-40	30	30	30	30
Green medium Japan, per lb.	25	25	30-40	30	30	30	30
Coffee—Medium Mocha, per lb.	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.	35	1 00	50-65	75	1 40	1 30	1 10
Vinegar—White wine XXX, per quart.	10	10	10	10	10	10	10
Starch—Laundry, per lb.	07	07	10	07	08	08	08
Coal—Anthracite, per ton of 2,000 lb.	6 00	7 00	7 50	7 00	7 50	7 50	8 00
Bituminous, per ton of 2,000 lb.	5 00	6 00	5 25	6 00	6 00	6 50	6 50
			4 50				
Wood—Hard best, per long cord.	5 00	6 00	8 50	8 00	8 00	8 00	8 00
Soft, per cord.	3 00	4 00	.....	6 00	6 00	6 00	6 00
Coal oil—Per gallon.	15	15	15	15	15	15	17

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—St. Thomas.</i>							
Beef—Sirloin steak, best, per lb.....	15	15	18	20	20	20	25
Medium chuck, per lb.....	12½	12½	12½	14	12½	12½	17
Veal, forequarter, per lb.....	12½	12½	11-12½	14	15	12½	15
Mutton, hindquarter, per lb.....	12½	12½-15	14	17	18	17	20
Pork—Fresh, roasting, per lb.....	12½	12½	16-17	17	17	18	20
Salt, per lb.....			18	16	14	15	
Bacon, best smoked, per lb.....	15	18	23	24	18	21	23
Fish—Fresh, good quality, per lb.....	09		10	10	15	16	18
Lard—Pure leaf, per lb.....	12½	14	20	18	15	18	20
Eggs—New laid, per dozen.....	18	25	35	35	35	38	40
Packed, per dozen.....		23	28	30		35	38
Milk—Per quart.....	05	05	06	06	07	07	07
Butter—Dairy, tub, per lb.....	20	23	28	25	30	32	27
Creamery, prints, per lb.....	23	28	32	30	34	35	30
Cheese—Canadian, old, per lb.....	14	18	17	20	22	25	20
Canadian, new, per lb.....	12½	15		16	18	20	18
Bread—For 1½ lb. loaf, per lb.....			04				
For 1½ lb. loaf, per lb.....				03½	03½	03½	03½
For 2 lb. loaf, per lb.....	02½	02½					
Flour—Strong Bakers', per lb.....	02	02½	03½	03	02½	03½	03½
Rolled Oats—Per lb.....	02½	03	03½	03	04	04	03½
Rice—Good medium, per lb.....	05	05	05	05	05-08	05½	05
Beans—Hand picked, per lb.....	04	05	05	05	05	05	05
Apples—Evaporated, per lb.....	10	08-10	10	12½	12	12½	12½
Prunes—Medium quality, per lb.....	07	10-15	08	10	13	10	12½
Sugar—Granulated, in 5 lots, per lb.....	06½	06	05½	18	07	06	5½
Yellow, in 5 lots, per lb.....	5½	05	05	05	06½	05½	5½
Tea—Black, medium, India or Ceylon, per lb.....	25 40	25-50	40	40	30-40	30-40	30-40
Green, medium Japan, per lb.....	25-40	25-50	40	40	30-40	30-40	30-40
Coffee—Medium Mocha, per lb.....	25-40	25-40	35-40	40	25-40	30-40	30-40
Potatoes—Per bag of 1½ bushels.....	65	75	80	90	1 60	1 25	1 25
Vinegar—White Wine XXX, per quart.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	10	10	08½	08	08-10	10	10
Coal—Anthracite, per ton of 2,000 lb.....	6 50	7 00	7 00	7 25	7 25	8 00	7 75
							7 50
Bituminous, per ton of 2,000 lb.....	5 00	5 50	3 25	6 00	6 00	6 00	5 00
			4 00				
Wood—Hard, best, per long cord.....	2 50	3 25	6 00	6 00	6 00	6 00	3 25
Soft, per cord.....				4 00	3 50	3 50	
Coal Oil—Per gallon.....	20	20	18	15	16	18	18

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Chatham.</i>							
Beef—Sirloin Steak, best, per lb.....	12½	12½	15	18	18	20	20
Medium Chuck, per lb.....	08-10	10	11	12½	15	15	15
Veal, forequarter, per lb.....	12½	10-12½	10-12½	15	15	15	18
Mutton, hindquarter, per lb.....	10	12	15	15-18	16	15	20
Pork—Fresh, roasting, per lb.....	12½	12½	18	15	15	18	25
Salt, per lb.....	15	15	16		16	14	20
Bacon, best smoked, per lb.....			22	23-25	20	24	26
Fish—Fresh, good quality, per lb.....	12½	12½	12½-13	15	10-15	10-15	15-10
Lard—Pure leaf, per lb.....	12½	13	20	20	15	17	18
Eggs—New laid, per dozen.....	18	25	25	35	35	35	35
Packed, per dozen.....			30	30	30	30	
Milk—Per quart.....	05	06	07	07	07	08	08
Butter—Dairy, tub, per lb.....	20	20-25	25	28	28	28	30
Creamery prints, per lb.....			30	30	30	32	32
Cheese—Canadian, old, per lb.....	16	16	16	16	16	18	18
Canadian, new, per lb.....	15	15		16	16	18	18
Bread—For 1½ lb. loaf, per lb.....	02½	02½					
For 2 lb. loaf, per lb.....			05	03½	04	04	03½
Flour—Strong, Bakers', per lb.....	02	2½	03	02½	2½	3½	03
Rolled Oats—Per lb.....	03½	03½	04	3½	04	04	04
Rice—Good, medium, per lb.....	05	05	05-07	07	05	05	05
Beans—Hand picked, per lb.....	04	04	04	05	05	05	05
Apples—Evaporated, per lb.....	10	10	12½			12½	12½
Prunes—Medium quality, per lb.....	10	10	10-12	10	12		12
Sugar—Granulated, in \$ lots, per lb.....	05½	05½	5 5-9	05½	08½	06½	5½
Yellow, in \$ lots, per lb.....	05	05	05	05	0 5½	5½	06½
Tea—Black medium, India or Ceylon, per lb.....	25-40	25-40	30	40-50	35	35	40
Green medium, Japan, per lb.....	25-40	25-40	30	40	30	35	30
Coffee—Medium Mocha, per lb.....	40	40	30	40	30-40	30-40	25-35
Potatoes—Per bag of 1½ bushels.....		1 50	90-1 00	80	1 60	1 25	1 25
Vinegar—White Wine XXX, per quart.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	09	09	08	08	08	08	06
Coal—Anthracite, per ton of 2,000 lb.....	7 00	7 00	7 00	7 25	7 25	9 00	8 00
Bituminous, per ton of 2,000 lb.....	3 75	3 75		5 00	5 00	5 25	5 25
Wood—Hard, best, per long cord.....	4 75	4 00	5 00	4 50	5 00		
Soft, per cord.....				5 00			
Coal Oil—Per gallon.....	3 00	3 00		3 50			
	18	18	15	10	15	15	15

NOTE.—1911 to 1913....Fish, herring.

1911 to 1913....Fish, whitefish.

1913.....Flour from 70 to 80 cents per 25 lb. bag.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Windsor.</i>							
Beef—Sirloin Steak, best, per lb.....	15	20	18	15	18	23	23
Medium chuck, per lb.....	10	12½	10-12½	10-12	12	14	14
Veal, forequarter, per lb.....	12½	15	09	09	12½	10	15
Mutton, hindquarters, per lb.....	12½	12½	12½	12½	15	18	18
Pork—Fresh, roasting, per lb.....	12½	12½	18	16	18	20	20
Salt, per lb.....	10	12½	16	14	16	16	16
Bacon, best smoked, per lb.....	18	20	22	20	22	22	28
Fish—Fresh, good quality, per lb.....	10	12½	15	15	15	15	15
Lard—Pure Leaf, per lb.....	12½	15	15	18	20	20	20
Eggs—New laid, per dozen.....	15	18	35	38	40	40	40
Packed, per dozen.....			30	30	28		
Milk—Per quart.....	05	06	07	08	08	10	08
Butter—Dairy, tub, per lb.....	18	20	30	30	30	35	35
Creamery prints, per lb.....	22	25	35	37	35	38	37
Cheese—Canadian, old, per lb.....	16	16	20	20	24	24	24
Canadian, new, per lb.....				20	20	20	20
Bread—For 1½ lb. loaf, per lb.....			04				
For 1½ lb. loaf, per lb.....	03½	03½		04	04	04	04
Flour—Strong, Bakers', per lb.....	03	03	03½	03	03	03	03
Rolled Oats—Per lb.....	05	05	05	05	05	05	05
Rice—Good medium, per lb.....	05	05	05	05	05	05	08
Beans—Hand picked, per lb.....	10	10	05	07	07	07	07
Apples—Evaporated, per lb.....	10	10	15	12½	12½	12½	12½
Prunes—Medium quality, per lb.....	10	10	10	12½	12½	12½	12½
Sugar—Granulated, in \$ lots, per lb.....	05	05	06	06	08	08	06
Yellow, in \$ lots, per lb.....	04½	04½	05	05	07	07	06
Tea—Black medium, India or Ceylon, per lb.....	30	30	35	30	30	30	30
Green medium, Japan, per lb.....	30	30	35	30	30	30	30
Coffee—Medium Mocha, per lb.....	30	30	40	30	30	30	30
Potatoes—Per bag of 1½ bushels.....	90	1 65	90	90	1 75	1 80	1 50
Vinegar—White Wine XXX, per quart.....	10	10	10	10	10	10	10
Starch—Laundry, per lb.....	08	08	10	10	10	10	10
Coal—Anthracite, per ton of 2,000 lb.....	7 00	7 50	7 50	7 50	7 75	8 00	8 25
Bituminous, per ton of 2,000 lb.....	4 25	4 50	5 00	5 00	5 00	5 00	5 00
Wood—Hard, best, per long cord.....	7 00	7 00	8 00	8 00	8 00	8 00	8 00
Soft, per cord.....	5 00	5 00		4 50	5 00	5 00	5 00
Coal Oil—Per gallon.....	16	16	20	20	20		20

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Owen Sound.</i>							
Beef—Sirloin steak, best, per lb.	15	15				22	22
Medium chuck, per lb.	10	10				12-15	13-15
Veal, forequarter, per lb.	10	12½				15-18	15
Mutton, hindquarter, per lb.	12½	12½				15	15
Pork—Fresh roasting, per lb.	10	12½				15-17	20
Salt, per lb.						17	18-20
Bacon, best smoked, per lb.	12	13				20	23
Fish—Fresh, good quality, per lb.						11	11
Lard—Pure Leaf, per lb.	15	15				15	17
Eggs—New laid, per dozen.	20	24				35	45
Packed, per dozen.	18	22				32	40
Milk—Per quart.						07	07
Butter—Dairy, tub, per lb.	20	24				27	27
Creamery prints, per lb.	25	29				28	
Cheese—Canadian, old, per lb.	16	16				18	18
Canadian, new, per lb.	15	15				18	18
Bread—For 1½ lb. loaf, per lb.						04	04
Flour—Strong, Bakers, per lb.	02	2½				2½	02½
Rolled Oats—Per lb.						04	04½
Rice—Good medium, per lb.	05	05				05	05
Beans—Hand picked, per lb.	04	05				07	07
Apples—Evaporated, per lb.	09	09				12½	12½
Prunes—Medium quality, per lb.	09	09				12½-15	12½
Sugar—Granulated, in 5 lots, per lb.	05	05				06½	5½
Yellow, in 5 lots, per lb.	04	04				5½	5½
Tea—Black medium, India or Ceylon, per lb.	25	25				25	30
Green medium, Japan, per lb.	25	25				25	30
Coffee—Medium Mocha, per lb.						25-40	40
Potatoes—Per bag of 1½ bushels.	50	90				1 15	1 25
Vinegar—White wine XXX per quart.	10	10				10	10
Starch—Laundry, per lb.	08	08				08-10	10
Coal—Anthracite, per ton of 2,000 lb.						9 00	7 25
Bituminous, per ton of 2,000 lb.						6 00	5 00
Wood—Hard, best, per long cord.						7 00	7 50
Soft per cord.						3 75	3 50
Coal Oil—Per gallon.						15	15



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Cobalt.</i>							
Beef—Sirloin steak, best, per lb .....					20	20-22	25
Medium chuck, per lb .....					12½	12½	16
Veal forequarter, per lb .....					15	15	15
Mutton hindquarter, per lb .....					20	18	20
Pork—Fresh roasting, per lb .....					15	20	20
Salt, per lb .....					15	18	18
Bacon, best smoked, per lb .....					20	22	24
Fish—Fresh good quality, per lb .....					10-12½	14-15	12-14
Lard—Pure Leaf, per lb .....					15	20	17
Eggs—New laid, per dozen .....					50	45-50	60
Packed, per dozen .....					35	32	40
Milk—Per quart .....					10	10	12
Butter—Dairy tub, per lb .....					30		
Creamery prints, per lb .....					35	35	38
Cheese—Canadian, old per lb .....					18	20	20
Canadian new, per lb .....							
Bread—For 3 lb. loaf, per lb .....					04	03½	03½
Flour—Strong Bakers, per lb .....					03½	03½	03½
Rolled Oats—Per lb .....					05	05	05
Rice—Good medium, per lb .....					05	05	05
Beans—Hand picked, per lb .....					05	06	05
Apples—Evaporated, per lb .....					15	13	10
Prunes—Medium quality, per lb .....					10	15	13
Sugar—Granulated in 5 lots, per lb .....					07½	06½	06½
Yellow, in 5 lots, per lb .....					06½	05½	05½
Tea—Black Medium, India or Ceylon, per lb .....					25	30	30
Green Medium, Japan, per lb .....					25	30	30
Coffee—Medium Mocha, per lb .....					30	40	45
Potatoes—Per bag of 1½ bushels .....					1 50	1 20	1 35
Vinegar—White Wine XXX, per quart .....					10	10	10
Starch—Laundry, per lb .....					08	10	10
Coal—Anthracite, per ton of 2000 lb .....					9 50	11 00	10 00
Bituminous, per ton of 2000 lb .....							
Wood—Hard best, per long cord .....					5 50	5 00	5 00
Soft, per cord .....					5 00	4 00	4 00
Coal oil—Per gallon .....					25	25	25

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Sault Ste. Marie.</i>							
Beef—Sirloin steak, best, per lb.....			15-17	18	20	23	28
Medium chuck, per lb.....			09-10	12½	15	20	18
Veal forequarter, per lb.....			12½	14	16		18
Mutton hindquarter, per lb.....			16	18	18	15	23
Pork—Fresh roasting, per lb.....			17	18	17	15	22
Salt, per lb.....			17	16	15	14	17
Bacon, best smoked, per lb.....			20	22	20	15	24
Fish—Fresh good quality, per lb.....			12½	12½	12½	12½	15
Lard—Pure Leaf, per lb.....			20	18	16	18	18
Eggs—Now laid, per dozen.....			50	50		50	45
Packed, per dozen.....			30	30	30	50	30
Milk—Per quart.....			09	09	10	10	10
Butter—Dairy tub, per lb.....			26-27	25	28	27	27
Creamery prints, per lb.....			30-32	30	34	35	35
Cheese—Canadian old, per lb.....			16-17		20	20	20
Canadian new, per lb.....				16			18
Bread—For 1½ lb. loaf per lb.....			4½	04	04½	04½	04½
Flour—Strong Bakers, per lb.....			03	03	03½	03½	03½
Rolled Oats—Per lb.....			04½	05	04½	05	05
Rice—Good medium, per lb.....			05	05	05	05	07
Beans—Hand picked, per lb.....			05	05	05	05	06
Apples—Evaporated, per lb.....			12½	12½	13		10
Prunes—Medium quality, per lb.....			10	12½	12½	10	12½
Sugar—Granulated in 5 lots, per lb.....			05½	05½	07½	05½	05½
Yellow in 5 lots, per lb.....			05½	05½	06½	05	05½
Tea—Black Medium, India or Ceylon, per lb.....			30	30	30	40	30-40
Green Medium, Japan, per lb.....			40	30	30	40	30-40
Coffee—Medium Mocha, per lb.....			30	30	30	40	30-45
Potatoes—Per bag of 1½ bushels.....			75	1 15	1 50	1 00	1 00
Vinegar—White Wine XXX, per quart.....			10	10	10	10	10
Starch—Laundry, per lb.....			10	10	10	10	10
Coal—Anthracite, per ton of 2000 lb.....			7 50	8 00	8 00	9 00	8 25
Bituminous, per ton of 2000 lb.....			5 50	5 50	5 50		4 50
							6 00
Wood—Hard best, per long cord.....			5 50	6 00	6 00	5 50	6 00
							7 00
Soft, per cord.....				4 00	5 00	5 00	4 00
							4 50
Coal oil—Per gallon.....			25	22	22	25	22

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario—Port Arthur and Fort William.</i>							
Beef—Sirloin steak, best, per lb.	15	18	18	25	22-25	25	25
Medium chuck, per lb.	12½	12½	12½	15-20	15-20	12½-15	15-18
Veal forequarter, per lb.	15	12½	15	15	17	18	20
Mutton hindquarter, per lb.	15	18	20	22	25	22-25	25
Pork—Fresh roasting, per lb.	15	18	18-20	25	18-25	22-20	25
Salt, per lb.	12½	14	20	20	18	18-20	18
Bacon, best smoked, per lb.	15	182	2½-25	23	22	22-25	28-30
Fish—Fresh good quality, per lb.	10	10	10-15	10-12	10-12½	12½-15	12½
Lard—Pure Leaf, per lb.	17	17	15	20	20	15-18	18-20
Eggs—New laid, per dozen.	20	28	45-60	50	45	45	40
Packed, per dozen.	18	25	35	35	35	35	35
Milk—Per quart.			10	10	10-12	10	10
Butter—Dairy tub, per lb.	20	25	30	25½	30	35	30
Creamery prints, per lb.	23	28	35	30	35	40	35
Cheese—Canadian old, per lb.			20			20	20
Canadian new, per lb.				20	20	20	20
Bread—For 1½ lb. loaf per lb.						20	05½
For 2 lb. loaf, per lb.			04½	03½	03½	03½	
Flour—Strong Bakers, per lb.			03½	03½	03½	03½	03½
Rolled Oats—Per lb.			03½	03½	03½	03½	03½
Rice—Good medium, per lb.			05	05	03	05	05
Beans—Hand picked, per lb.			05	05	03	06½	05
Apples—Evaporated, per lb.			12½	15	17½	12½-15	12½
Prunes—Medium quality, per lb.			8½	15	15	12½-15	12½
Sugar—Granulated in 5 lots, per lb.			07	06½	07½	6½-7½	05½
Yellow in 5 lots, per lb.			05	05½	06½	06½	5½
Tea—Black Medium, India or Ceylon, per lb.			25 50	25 60	25 60	30	30 60
Green Medium, Japan, per lb.			25-50	30-40	30-40	30	30
Coffe—Medium Mocha, per lb.			40	25-40	30-40	25-40	30-50
Potatoes—Per bag of 1½ bushels.			1 00	1 00	1 25	1 25	1 10
Vinegar—White Wine XXX, per quart.			10	10	10	10	10
Starch—Laundry, per lb.			10	10	10	08-10	10
Coal—Anthracite, per ton of 2000 lb.			8 75	8 00	8 00	8 50	8 25
					8 50		
Bituminous, per ton of 2,000 lb.			6 00	6 50	6 00	5 75	6 00
Wood—Hard best, per long cord.			5 00	5 00	5 00	5 50	5 50
				6 00	6 00	6 00	6 00
Soft, per cord.				4 00	4 00	4 50	4 50
				3 00	3 50	3 50	3 50
Coal oil—Per gallon.			35	25	25	25	25

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<i>Ontario.</i>							
Beef—Sirloin steak, best, per lb.....	13.2	15.1	16.8	18.6	19.4	21.0	237.
Medium chuck, per lb.....	19.7	11.2	10.7	12.5	13.2	14.3	12..
Veal forequarter, per lb.....	9.8	10.9	11.1	12.9	13.6	14.5	16.0
Mutton hindquarter, per lb.....	10.9	12.8	14.2	16.3	15.8	17.0	19.1
Pork—Fresh roasting, per lb.....	11.1	12.5	16.8	17.5	16.6	18.3	20..
Salt, per lb.....	10.2	11.8	16.2	16.7	15.7	16.3	18.6
Bacon best smoked, per lb.....	11.0	16.9	21.8	22.9	20.9	22.3	25.3
Lard—Pure Leaf, per lb.....	12.7	13.9	18.5	18.7	16.2	18.4	18.5
Eggs—New laid, per dozen.....	20.8	24.7	39.4	40.4	42.2	41.7	46.9
Packed, per dozen.....	17.7	21.4	29.4	30.7	31.7	33.7	36.5
Milk—Per quart.....	5.2	5.6	6.8	7.1	7.2	7.9	8..
Butter—Dairy tub, per lb.....	20.3	23.3	26.0	26.8	29.1	30.7	29.3
Creamery prints, per lb.....	23.8	26.5	30.4	30.4	33.6	34.8	33.6
Cheese—Canadian old, per lb.....	15.0	16.0	17.7	18.4	19.7	20.6	20..
Canadian new, per lb.....	13.0	14.3	16.4	16.1	17.8	18.8	18.7
Bread—Per lb.....	3.2	3.3	3.9	3.7	3.8	3.7	3.2
Flour—Strong Bakers, per lb.....	2.4	2.7	3.0	3.0	3.0	3.1	3..
Rolled Oats—Per lb.....	3.3	3.6	4.2	3.9	4.2	4.2	41.
Rice—Good medium, per lb.....	5.1	5.1	5.4	5.0	4.9	5.3	57.
Beans—Hand picked, per lb.....	4.4	4.8	5.0	5.3	5.0	6.4	506
Apples—Evaporated, per lb.....	8.7	9.3	10.0	11.2	12.5	12.5	1186
Prunes—Medium quality, per lb.....	9.0	9.8	9.2	11.0	12.4	12.4	1230
Sugar—Granulated in \$ lots, per lb.....	5.3	5.3	5.7	6.5	6.8	6.1	532
Yellow in \$ lots, per lb.....	5.1	4.7	4.9	5.2	6.1	5.7	524
Tea—Black Medium, India or Ceylon, per lb.....	30.9	30.9	32.2	34.2	33.2	33.9	349.
Green, Medium, Japan, per lb.....	29.2	29.8	32.5	33.7	32.7	32.9	3302
Coffee—Medium Mocha, per lb.....	32.4	32.5	32.9	35.0	34.3	35.8	3658
Potatoes—Per bag of 1½ bushels.....	74.0	91.5	73.8	84.8	1.52.1	1.21.9	1.207.
Vinegar—White Wine XXX, per quart.....	9.9	9.9	9.9	9.9	9.9	9.9	1051
Starch—Laundry, per lb.....	7.6	7.8	8.7	8.7	8.6	8.7	89.
Coal—Anthracite, per ton of 2000 lb.....	6.23	6.92	7.18	7.13	7.38	8.23	7.0.
Bituminous, per ton of 2000 lb.....	4.96	4.78	4.99	6.59	5.43	5.66	5.08
Wood—Hard best, per long cord.....	5.25	6.20	7.11	7.02	6.81	7.32	7.4.
Soft, per cord.....	3.87	4.51	4.77	4.77	4.89	5.07	5.8.
Coal oil—Per gallon.....	18.3	11.4	19.1	18.3	19.3	19.3	194.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Manitoba—Winnipeg.</i>							
Beef—Sirloin steak, best, per lb.....	15-18	20	18	20	23	25	25
Medium chuck, per lb.....	10	12½	12½	10	14	16	16
Veal forequarter, per lb.....	12½	14	12½	12½	14	18	18
Mutton hindquarter, per lb.....	12½-15	17	15	18	22	24	24
Pork—Fresh roasting, per lb.....	12½	18	19	18	22	22	22
Salt, per lb.....	12	18	16	20	21	18	18
Bacon best smoked, per lb.....	18	20	25	28	28	25	35
Fish—Fresh good quality, per lb.....	09	10	15	12½	12	12½	15
Lard—Pure Leaf, per lb.....	12½	15	22	20	18	18	18
Eggs—New laid, per dozen.....	15-20	20-25	60	50	40	45	45
Packed, per dozen.....	15-20	20-25	35	32½	35	35	35
Milk—Per quart.....	5-5	06½	10	10	10	10	10
Butter—Dairy tub, per lb.....	20	20 25	27½	30	33	35	30
Creamery, Prints, per lb.....	22-25	22-28	38	35	40	40	35
Cheese—Canadian old, per lb.....	12½-15	15	18	16	20	23	23
Canadian new, per lb.....	15	15			20	20	20
Bread—For 1 lb. loaf, per lb.....			05	05	05	05	05
Flour—Strong Bakers, per lb.....	02	02½	02½	20½	02½	03½	03½
Rolled Oats—Per lb.....	04½	04½	06	04	04	05	05
Rice—Good medium, per lb.....	06	04½	08½	06½	07	07	06½
Beans—Hand picked, per lb.....	05	03	05	04½	05	06	05
Apples—Evaporated, per lb.....	15	12	08½	12½	13½	12	12
Prunes—Medium quality, per lb.....	10	10	08½	10	12	12	10
Sugar—Granulated in \$ lots, per lb.....	06	06	06	05½	7½	06½	06½
Yellow in \$ lots, per lb.....	05	05½	05	05½	06½	06½	06½
Tea—Black Medium, India or Ceylon, per lb.....			35	35	35	35	35
Green Medium, Japan, per lb.....	50		35	35	35	35	35
Coffee—Medium Mocha, per lb.....	45	40	35	35	35	35	35
Potatoes—Per bag of 1½ bushels.....	90	50	70	1.35	1.35	90	1.00
Vinegar—White Wine XXX, per quart.....	20	10	10	15	12	10	10
Starch—Laundry, per lb.....	10	10	10	10	08½	08½	08
Coal—Anthracite, per ton of 2000 lb.....		10.00	11.00	10.50	10.50	11.00	11.50
Bituminous, per ton of 2000 lb.....			9.00	9.00	9.50	9.00	9.00
Wood—Hard best, per long cord.....		6.00	6.75	7.50	8.00	7.00	7.00
Soft per cord.....		5.00		6.50	6.00	6.00	6.00
Coal oil—Per gallon.....	35	35	35	35	25	25	25



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Manitoba—Brandon.</i>							
Beef—Sirloin steak, best per lb.....	15	10-20	20	17	20	20	25
Medium chuck, per lb.....	10	12½	15	12½	12½	15	18
Veal forequarter, per lb.....	10	12½	12½	15	12½	15	18
Mutton hindquarter, per lb.....	20	20	18	20	20	20	22
Pork—Fresh roasting, per lb.....	15	15	18	22	18	18	20
Salt, per lb.....	15	15	15	18	18	18	
Bacon best, smoked, per lb.....	20	25	25	35	25	25	35
Fish—Fresh good quality, per lb.....	10	12½	15	15-18	15-18	20	12-20
Lard—Pure leaf, per lb.....	20	20	22	25	20	20	20
Eggs—New laid, per dozen.....	25	28	50	45	50	40	50
Packed, per dozen.....			35	35	40	30	40
Milk—Per quart.....			08	10	10	11	10
Butter—Dairy tub, per lb.....	20	27½	25	32	33	37½	35
Creamery prints, per lb.....		30	35	35	40	40	40
Cheese—Canadian old, per lb.....	13	15	18	18	23	22½	22½
Canadian new, per lb.....					23	22½	22½
Bread—For 1 lb. loaf, per lb.....	05						
For 1½ lb. loaf, per lb.....		04	04	04	04	04	03½
Flour—Strong Bakers, per lb.....	02½	02½	03½	03½	03½	03½	03½
Rolled Oats—Per lb.....	03	03½	05	05	05	05	05
Rice—Good medium, per lb.....	06	06	07	07	07	07	08½
Beans—Hand picked, per lb.....	05	04½	10	05	06	06	05
Apples—Evaporated, per lb.....			15	15	15	15	12½
Prunes—Medium quality, per lb.....	08	08	10	13	12½	12½	12½
Sugar—Granulated in \$ lots, per lb.....	06	06	06	07	08½	07	06½
Yellow in \$ lots, per lb.....	05½	05½	06	06½	07½	08	06½
Tea—Black Medium, India or Ceylon, per lb.....	35	35	35	35	30	35	35
Green Medium, Japan, per lb.....	35	35	40	35	30	35	35
Coffee—Medium Mocha, per lb.....	40	40	40	35	30	35	40
Potatoes—Per bag of 1½ bushels.....	60	75	90	1.10	90	75	1.00
Vinegar—White Wine XXX, per quart.....	15	15	10	10	15	15	13½
Starch—Laundry, per lb.....	10	10	10	10	10	10	10
Coal—Anthracite, per ton of 2000 lb.....	11.50	11.50	11.50	11.50	11.25	11.75	11.50
Bituminous, per ton of 2000 lb.....	9.50	9.50	9.00	9.00	9.25	9.50	9.00
Wood—Hard best, per long cord.....	6.00	6.50	6.50	6.75	9.00	8.75	7.50
Soft, per cord.....	3.75	3.75		4.75	6.00	6.75	5.75
Coal Oil—Per gallon.....	35	35	35	35	30	30	30

Note.—1910, 1911, and 1913.....Fish.....Halibut.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Manitoba—Recapitulation.</i>							
Beef—Sirloin steak, best, per lb.....	15.7	17.5	19.0	18.5	21.5	22.5	25.0
Medium chuck, per lb.....	10.0	12.5	13.7	11.2	13.2	15.5	17.0
Veal, forequarter, per lb.....	11.2	13.5	12.5	13.7	13.2	16.5	18.0
Mutton, hindquarter, per lb.....	16.7	18.5	16.5	19.0	21.0	22.0	23.0
Pork—Fresh, roasting, per lb.....	13.7	16.5	18.5	20.0	20.0	20.0	21.0
Salt, per lb.....	13.5	16.5	15.5	19.0	19.5	18.0	18.0
Bacon, best smoked, per lb.....	19.0	22.5	25.0	31.5	26.5	25.0	35.0
Lard—Pure leaf, per lb.....	15.0	17.5	22.0	22.5	19.0	19.0	19.0
Eggs—New laid, per dozen.....	21.2	25.2	55.0	47.5	45.0	42.5	47.5
Packed, per dozen.....	17.5	22.5	35.0	33.7	37.5	32.5	37.5
Milk—Per quart.....	5.5	6.2	9.0	10.0	10.0	10.5	10.0
Butter—Dairy tub, per lb.....	20.0	25.0	26.2	31.0	33.0	36.2	32.5
Creamery prints, per lb.....	23.5	27.0	36.5	35.0	40.0	40.0	37.5
Cheese—Canadian old, per lb.....	13.2	15.0	18.0	17.0	21.5	22.7	22.7
Canadian new, per lb.....	15.0	15.0	18.0	17.0	21.5	21.2	21.2
Bread—Per lb.....	5.0	4.0	4.5	4.5	4.5	4.5	4.2
Flour—Strong Bakers, per lb.....	2.2	2.4	3.0	3.6	3.2	3.5	3.3
Rolled Oats—Per lb.....	3.6	3.8	5.5	4.5	4.5	5.0	5.0
Rice—Good medium, per lb.....	6.0	5.2	7.6	6.6	7.0	7.0	7.4
Beans—Hand picked, per lb.....	5.0	3.6	7.5	4.6	5.5	6.5	5.0
Apples—Evaporated—per lb.....	15.0	13.5	11.6	13.7	14.2	13.5	12.2
Prunes—Medium quality, per lb.....	9.0	9.0	9.2	11.5	12.2	12.2	11.2
Sugar—Granulated, in \$ lots, per lb.....	6.0	6.0	6.0	6.3	7.8	6.6	6.6
Yellow, in \$ lots, per lb.....	5.2	5.5	5.5	6.3	7.2	7.1	6.5
Tea—Black medium, India or Ceylon, per lb.....	35.0	35.0	35.0	35.0	32.5	35.0	35.0
Green medium, Japan, per lb.....	42.5	35.0	37.5	35.0	32.5	35.0	35.0
Coffee—Medium Mocha, per lb.....	42.5	40.0	37.5	35.0	32.5	35.0	37.5
Potatoes—Per bag of 1½ bushel.....	75.0	62.5	80.0	1.22.5	1.12.5	82.5	1.00.0
Vinegar—White Wine XXX, per quart.....	17.5	12.5	10.0	12.5	13.5	12.5	11.5
Starch—Laundry, per lb.....	10.0	10.0	10.0	10.0	9.2	9.2	9.0
Coal—Anthracite, per ton of 2,000 lb.....	11 50	10 75	11 25	10 75	11 37	11 37	11 50
Bituminous, per ton of 2,000lb.....	9 50	9 50	9 00	9 00	9 37	9 25	9 00
Wood—Hard best, per long cord.....	6 00	6 25	6 63	7 13	8 50	7 87	7 25
Soft, per cord.....	3 75	4 37	5 63	5 63	6 00	6 37	5 87
Coal Oil—Per gallon.....	35	35	30.0	27.5	27.5	27.5	27.5

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Saskatchewan—Regina.</i>							
Beef—Sirloin steak, best, per lb.	18	18	18	22	25	25	25
Medium chuck, per lb.	15	15	10-12	15-17	18	18	18
Veal, forequarter, per lb.	15	15	12-15	20	22	22	22
Mutton, hindquarter, per lb.	18	18	20	20-25	22-25	25	25
Pork—Fresh, roasting, per lb.	15	15	18	18-20	22	25	25
Salt, per lb.			15	15	15	22	22
Bacon, best smoked, per lb.	20	20	25	35-40	35	32	32
Fish—Fresh, good quality, per lb.	10	10	08	18	15-18	15	15
Lard—Pure leaf, per lb.	20	15	22	25	20	20	20
Eggs—New laid, per dozen.	30	30	40	40	50	50	50
Packed, per dozen.			35	35	35	35	35
Milk—Per quart.	10	10	08½	10	12	12½	12½
Butter—Dairy tub, per lb.		20	25	30	30	35	30
Creamery, prints, per lb.	30	30	35	35	40	40	40
Cheese—Canadian old, per lb.	15	14	20	20	25	20	20
Canadian new, per lb.	15	14		20	25	20	20
Bread—For 1½ lb loaf, per lb.	06½	06½	06½	04	06½	06½	06½
Flour—Strong Bakers, per lb.	03	03½	03½	04½	05	03½	03½
Rolled Oats—Per lb.	03½	03½	3½	06	05	05	05
Rice—Good medium, per lb.	08½	08½	05-06	08	05	06½	06½
Beans—Hand picked, per lb.	05	05	06	06	05	05	05
Apples—Evaporated, per lb.	12½	12½	12½	15	15	15	15
Prunes—Medium quality, per lb.	12½	12½	10	12½	15	12½	12½
Sugar—Granulated, in \$ lots, per lb.	10	08	05½	07½	08½	06½	06½
Yellow, in \$ lots, per lb.	10	08	05½	06½	07½	06½	06½
Tea—Black medium, India or Ceylon, per lb.	35	40	35	35	40	35	35
Green medium, Japan, per lb.	50	50	35	40	40	35-40	35-40
Coffee—Medium Mocha, per lb.	30	45	33½	35	40	35-40	35-40
Potatoes—Per bag of 1½ bushels.	45	75	85	1.35	1.20	1.05	1.20
Vinegar—White Wine XXX, per quart.	15	15	10	15	15	15	15
Starch—Laundry, per lb.	15	12½	10	10	15	10	10
Coal—Anthracite, per ton of 2,000 lb.	13.00	12.50	12.50	13.00	12.50	13.25	13.25
Bituminous, per ton of 2,000 lb.	6.75	8.50	8.50	8.50	10.00	10.00	10.00
Wood—Hard best, per long cord.		8.50	6.50	8.00	9.00	9.00	9.00
Soft, per cord.		8.50		7.75	8.50	8.50	8.50
Coal Oil—Per gallon.	35	40	35	35	30	30	30

Note—1910 and 1911—Fish... Halibut.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Saskatchewan—Prince-Albert.</i>							
Beef—Sirloin steak, best, per lb—						22	22
Medium, chuck, per lb—						15	15
Veal, forequarter, per lb—						15	15
Mutton, hindquarter, per lb—						20	22
Pork—Fresh roasting, per lb—						20	20
Salt, per lb—						20	18
Bacon, best smoked, per lb—						30	25-30
Fish—Fresh, good quality, per lb—						18-20	15-18
Lard—Pure leaf, per lb—						10-20	18
Eggs—New laid, per dozen—						50	45
Packed, per dozen—						40	35
Milk—Per quart—						12½	12½
Butter—Dairy tub, per lb—						35	20
Creamery prints, per lb—						45	40-35
Cheese—Canadian old, per lb—							25
Canadian new, per lb—						25	25
Bread—For 8 lb. loaf, per lb—						03½	03½
Flour—Strong bakers, per lb—						03	03½
Rolled Oats—Per lb—						05	04½
Rice—Good medium, per lb—						08	08½
Beans—Hand picked, per lb—						06	07
Apples—Evaporated, per lb—						12½	15
Prunes—Medium quality, per lb—						12½	12½
Sugar—Granulated, in \$ lots, per lb—						07	06
Yellow, in \$ lots, per lb—						06½	06
Tea—Black Medium India or Ceylon, per lb—						40	40
Green Medium, Japan, per lb—						40	35-40
Coffee—Medium Mocha, per lb—						30	35-40
Potatoes—Per bag of 1½ bushels—						90	1.00
Vinegar—White Wine XXX, per gallon—						15	12½
Starch—Laundry, per lb—						10	10
Coal—Anthracite, per ton of 2,000 lb—						13 50	13 50
Bituminous, per ton of 2,000 lb—						11 00	11 00
Wood—Hard best, long cord—						5 50	5 50
Soft, per cord—						4 50	4 50
Coal Oil—Per gallon—						30	30

NOTE—1912 and 1913—Fish....Halibut..

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Saskatchewan—Moose Jaw.</i>							
Beef—Sirloin steak, best, per lb.....			17	17	20	25	30
Medium chuck, per lb.....			10	10	18	16	20
Veal, forequarter, per lb.....			15	15	18	.....	20
Mutton, hindquarter, per lb.....			15	15	20	25	28
Pork—Fresh, roasting, per lb.....			15	15	18	20	25
Salt, per lb.....			15	15	.....	18	20
Bacon, best smoked, per lb.....	12½		25	25	25	23	25
Fish—Fresh, good quality, per lb.....			12½	12½	15	18	18
Lard—Pure leaf, per lb.....	15		22	22	22½	25	18
Eggs—New laid, per dozen.....	15				50	50	45
Packed, per dozen.....			35	35	35	40	35
Milk—Per quart.....			10	10	10	11	11
Butter—Dairy tub, per lb.....			30	30	35	.....	35
Creamery prints, per lb.....			35-40	35-40	40	40	40
Cheese—Canadian old, per lb.....			20	20	20	.....	20
Canadian new, per lb.....						22½	20
Bread—For 4 lb. loaf, per lb.....			06½	06½	06½	06½	05
Flour—Strong Bakers, per lb.....	03		03½	03½	03½	03½	03½
Rolled Oats—Per lb.....	03½		03½	03½	04½	05	03½
Rice—Good medium, per lb.....			05	05	05	06	06
Beans—Hand picked, per lb.....			07	07	06	06	06
Apples—Evaporated, per lb.....			12½	12½	15	17½	15
Prunes—Medium quality, per lb.....			10	10	12½	15	15
Sugar—Granulated, in \$ lots, per lb.....			06	06	06½	06½	06½
Yellow, in \$ lots, per lb.....			05½	05½	06	06½	06½
Tea—Black medium, India or Ceylon, per lb.....			40	40	40	40	40
Green medium, Japan, per lb.....			40	40	40	40	40
Coffee—Medium Mocha, per lb.....			40	40	40	40	40
Potatoes—Per bag of 1½ bushels.....	75		1 35	1 35	1 50	75	65
Vinegar—White Wine XXX, per quart.....			15	15	15	15	15
Starch—Laundry, per lb.....			10	10	10	15	15
Coal—Anthracite, per ton of 2,000 lb.....			14 50	14 50	13 50	13 10	13 50
Bituminous, per ton of 2,000 lb.....			8 00	8 00	8 00	8 25	8 50
Wood—Hard best, per long cord.....					9 00	8-00	8 00
Soft, per cord.....					35	35	30
Coal oil—Per gallon.....			35	35			

NOTE.—1910 prices—Sirloin steak—taken from January 1911.



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Saskatchewan—Saskatoon.</i>							
Beef—Sirloin steak, best, per lb.						25	28
Medium chuck, per lb.						16	18
Veal, forequarter, per lb.						20	22
Mutton, hindquarter, per lb.						23	25
Pork—Fresh, roasting, per lb.						20	20
Salt, per lb.						23	20
Bacon, best smoked, per lb.						25	30
Fish—Fresh, good quality, per lb.						18	15
Lard—Pure leaf, per lb.						20	20
Eggs—New laid, per dozen.		10½-12				40-60	50-60
Packed, per dozen.		28				40-50	40
Milk—Per quart.		25				15	15
Butter—Dairy tub, per lb.						35	35
Creamery prints, per lb.						45	40
Cheese—Canadian old, per lb.						25	25
Canadian new, per lb.							
Bread—For 1 lb. loaf, per lb.		06½					
For 1½ lb. loaf, per lb.						06½	06½
Flour—Strong Bakers, per lb.		2-15-				04	03½
		2-4					
		3-1				04½	04
Rolled Oats—Per lb.						04	07
Rice—Medium quality, per lb., good.						10	06
Beans—Hand picked, per lb.						20	12½
Apples—Evaporated, per lb.		09½				17½	12½
Prunes—Medium quality, per lb.		08½				07½	07½
Sugar—Granulated, in \$ lots, per lb.		06-3				06½	06½
Yellow, in \$ lots, per lb.							
Tea—Black medium, India or Ceylon, per lb.		33½				40	40
Green medium, Japan, per lb.		33½				40	40
Coffee—Medium Mocha, per lb.		33½				40	40
Potatoes—Per bag of 1½ bushels.		60				97	1 35
Vinegar—White Wine, XXX, per quart.						25	25
Starch—Laundry, per lb.						12½	15
Coal—Anthracite, per ton of 2,000 lb.		15 00				14 00	13 50
Bituminous, per ton of 2,000 lb.		8 00				7 00	10 00
		8 50				10 00	
Wood—Hard best, per long cord.						7 50	7 50
Soft, per cord.		4 50				6 50	6 50
		6 00					
Coal oil—Per gallon.						30	30

NOTE.—All hardwood is poplar, tamarac, etc., west of Ontario.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Saskatchewan—Recapitulation.	1900	1905	1909	1910	1911	1912	1913
Beef—Sirloin steak, best, per lb.....	18	18	17.5	19.5	22.5	24.2	25.5
Medium chuck, per lb.....	15	15	10.5	13.0	18.0	16.2	18.2
Veal, forequarter, per lb.....	15	15	14.2	17.5	20.0	19.5	19.2
Mutton, hindquarter, per lb.....	18	17	17.5	18.7	21.7	24.2	18.7
Pork—Fresh roasting, per lb.....	15	15	16.5	17.0	20.0	21.2	22.5
Salt, per lb.....	15	15	15	15	15	20.7	20
Bacon, best smoked, per lb.....	20	20	25	31.2	35	27.5	27.3
Lard—Pure leaf, per lb.....	17.5	13.1	22	23.5	21.2	20	19
Eggs—New laid, per dozen.....	22.5	29.0	37.5	45	50	52.5	47.5
Packed, per dozen.....	25	25	35	35	35	41.2	37.5
Milk—Per quart.....	10	10	9.1	10	11	12.7	12.7
Butter—Dairy tub, per lb.....	20	22.5	27.5	30	32.5	35	30
Creamery prints, per lb.....	30	30	36.2	36.2	40	42.5	38.7
Cheese—Canadian old, per lb.....	15	14	20	20	22.5	22.5	22.5
Canadian new, per lb.....	15	14	20	20	22.5	22.5	21.6
Bread—Per lb.....	6.6	6.4	6.4	5.1	6.4	5.7	5.4
Flour—Strong Bakers, per lb.....	03	2.8	3.2	3.7	4.3	3.6	3.4
Rolled Oats—Per lb.....	3.3	3.3	3.4	4.7	4.7	4.8	4.2
Rice—Good medium, per lb.....	8.3	8.3	5.2	6.5	5.0	6.0	6.8
Beans—Hand picked, per lb.....	05	05	6.5	6.5	5.5	6.7	5.7
Apples—Evaporated, per lb.....	12.5	10.7	12.5	13.7	15	16.2	14.3
Prunes—Medium quality, per lb.....	12.5	10.4	10.0	11.2	13.7	14.3	13.1
Sugar—Granulated, in \$ lots, per lb.....	10	7.1	5.8	6.5	7.4	6.2	6.6
Yellow, in \$ lots, per lb.....	10	08	5.3	5.8	6.5	6.4	6.1
Tea—Black medium, India or Ceylon, per lb.....	35	36	37.5	37.5	40	38.7	38.7
Green medium, Japan, per lb.....	50	41	37.5	40	40	39.5	39.2
Coffee—Medium Mocha, per lb.....	30	39	36.6	37.5	40	36.8	38.7
Potatoes—Per bag of 1½ bushels.....	60	67	1.10.0	1.35.0	1.35.0	91.7	1.05.0
Vinegar—White Wine XXX, per quart.....	15	15	12.5	15	15	17.5	16.8
Starch—Laundry, per lb.....	15	12.5	10	10	12.5	11.8	12.5
Coal—Anthracite, per ton of 2,000 lb.....	13 00	13 75	13 50	13 70	13 00	13 46	13 43
Bituminous, per ton of 2,000 lb.....	6 75	8 37	8 25	8 25	9 00	9 81	8 87
Wood—Hard best, per long cord.....	8 00	8 50	6 50	8 00	9 00	7 33	7 33
Soft, per cord.....	8 00	6 87	7 50	7 75	8 75	6 87	6 87
Coal oil—Per gallon.....	35	40	35	35	32.5	31.2	30.0

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Alberta—Medicine Hat.</i>							
Beef—Sirloin steak, best, per lb.		15				30	30
Medium chuck, per lb.		10				20	18
Veal, forequarter, per lb.		15				25	25
Mutton, hindquarter, per lb.		18				25	25
Pork—Fresh, roasting, per lb.		18				25	25
Salt, per lb.		12				20	18
Bacon, best smoked, per lb.		16				25	25
Fish—Fresh, good quality, per lb.		10				12½-18	12½-18
Lard—Pure leaf, per lb.		12				20	15
Eggs—New laid, per dozen.		35				60	60
Packed, per dozen.		25				45	40
Milk—Per quart.		06				12	12
Butter—Dairy tub, per lb.		22-25				30	35
Creamery prints, per lb.		30				45	40
Cheese—Canadian old, per lb.		15				25	25
Canadian new, per lb.		14				25	25
Bread—For 1½ lb. loaf, per lb.						06½	06½
For 2 lb. loaf, per lb.		05					
Flour—Strong Bakers, per lb.		03½				03½	03½
Rolled oats—Per lb.		03½				06½	05
Rice—Good medium, per lb.		07				08	08
Beans—Hand picked, per lb.		06				06	08
Apples—Evaporated, per lb.		12½				15	12½
Prunes—Medium quality, per lb.		10				15	12½
Sugar—Granulated, in \$ lots, per lb.		06½				08½	08½
Yellow, in \$ lots, per lb.		05½				7½	7½
Tea—Black medium India or Ceylon, per lb.		35-50				40	40
Green medium Japan, per lb.		35-50				40	40
Coffee—Medium Mocha, per lb.		25				30	30
Potatoes—Per bag of 1½ bushels.		90				1 20	1 25
Vinegar—White Wine XXX, per quart.		22½				15	15
Starch—Laundry, per lb.		10				12½	12½
Coal—Anthracite, per ton of 2,000 lb.							
Bituminous, per ton of 2,000 lb.		4 00					
Wood—Hard best, per long cord.							
Soft, per cord.							
Coal oil—Per gallon.		45				40	40

NOTE.—1912 and 1913.....Fish—Halibut.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Alberta—Calgary.</i>							
Beef—Sirloin steak, best, per lb.			15	18	20-22	25	22½
Medium chuck, per lb.			10	10-12		15	15
Veal, forequarter, per lb.			12½	12½-15	18	20	20
Mutton, hindquarter, per lb.			18	18	22	20	22
Pork—Fresh roasting, per lb.			15	18	20	20	20
Salt, per lb.			20	20	18	20	18
Bacon, best smoked, per lb.			20	25-30	25	23	30
Fish—Fresh, good quality, per lb.			10	12½-15	15-18	15-18	15
Lard—Pure leaf, per lb.			20	20	18	20	15
Eggs—New laid, per dozen.			60	60	60	50	50-60
Packed, per dozen.			40	40	40	40	40
Milk—Per quart.			10	10	10	10	10
Butter—Dairy tub, per lb.			25	25	35	33	
Creamery prints, per lb.			35	35	40	40	35-40
Cheese—Canadian old, per lb.			20	18	25	22	20
Canadian new, per lb.				17½	25	22	20
Bread—For 1½ lb. loaf, per lb.			06½				
For 2 lb. loaf, per lb.				03½	03½	03½	05
Flour—Strong bakers, per lb.			05½	02½	03½	03½	3½
Rolled oats—Per lb.			05	03½	04	04½	03½
Rice—Good medium, per lb.			06	05	08½	07	06
Beans—Hand picked, per lb.			05	06	08½	07	07
Apples—Evaporated, per lb.			15	15	12½	15	15
Prunes—Medium quality, per lb.			10	10	12½	12½	10
Sugar—Granulated, in 5 lots, per lb.			07	06	07	5½	05½
Yellow, in 5 lots, per lb.			06	06	07½	07½	05½
Tea—Black medium India or Ceylon, per lb.			40	25-40	40	35	35-40
Green medium Japan, per lb.			40	35	35	40	35-40
Coffee—Medium Mocha, per lb.			40	35	35	40	30-35
Potatoes—Per bag of 1½ bushels.			95	1 30	1 35	95	1 05
Vinegar—White wine XXX, per quart.			20	15	15	15	15
Starch—Laundry, per lb.			10	10	15	10	10
Coal—Anthracite, per ton of 2,000 lb.			7 00	8 50	13 50	8 95	7 00
Bituminous, per ton of 2,000 lb.			6 50	6 25	6 75	6 75	6 25
				6 75			6 75
Wood—Hard best, per long cord.				7 00	7 00		5 00
							5 50
Soft, per cord.			2 25		5 75		4 00
Coal oil—Per gallon.			40	35	35	35	35

NOTE.—1911.....Sirloin steak—Prices taken from January, 1912.

1912.....Sirloin steak—Prices taken from January, 1913.

1910, 1911 and 1912..Fish—Halibut.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Alberta—Edmonton.</i>							
Beef—Sirloin steak, best, per lb.....	12	15	15	15	20	23	27
Medium chuck, per lb.....	10	12	10	10-12½	12½	12½	15
Veal, forequarter, per lb.....	10	15	14	16	15	18	22
Mutton, hindquarter, per lb.....	15	17	18	18	20	25	25
Pork—Fresh, roasting, per lb.....	10	12	18	20	22	23	20
Salt, per lb.....	10	12	20	22	20	20	20
Bacon, best smoked, per lb.....	14	18	20	30	25	30	28
Fish—Fresh, good quality, per lb.....	15	15	15	20	10-20	15	15-20
Lard—Pure leaf, per lb.....	10	12	19	22	18	20	20
Eggs—New laid, per dozen.....	30	35	45	40	50	50	50
Packed, per dozen.....		30	35		40		40
Milk—Per quart.....	05	05	08½	10	10	10	10
Butter—Dairy tub, per lb.....	20	23	30	30	25	35	35
Creamery prints, per lb.....	25	30	35	35	35	40	40
Cheese—Canadian old, per lb.....	20	20	20	20	20	20	20
Canadian new, per lb.....	15	20			20	20	20
Bread—1½ lb. loaf, per lb.....	02½						
1½ lb. loaf, per lb.....		04½	06½	05	05	05	05
Flour—Strong Bakers, per lb.....	03	03½	03½	03½	03½	04	03½
Rolled Oats—Per lb.....	03½	03½	05½	04	04	04½	04
Rice—Good medium, per lb.....	07	07	05	05	05	08	08
Beans—Hand picked, per lb.....	06	06	05	05	05	08	07
Apples—Evaporated, per lb.....	10	11	13	13	13	12½	12½
Prunes—Medium quality, per lb.....	10	10	10	10	10	12½	11
Sugar—Granulated, in 50 lbs., per lb.....	05	05½	06½	06½	07½	06½	06
Yellow, in 50 lbs., per lb.....	04½	05	06	06	07	06	05½
Tea—Black medium India or Ceylon, per lb.....	40	40	40	40	40	40	40
Green medium Japan per lb.....	40	40	40	40	40	40	40
Coffee—Medium Mocha per lb.....	40	40	40	40	40	40	40
Potatoes—Per bag of 1½ bushels.....	60	75	90	90	1 00	1 05	90
Vinegar—White Wine XXX, per quart.....	20	20	20	20	20	20	15
Starch—Laundry, per lb.....	12	12	12½	12	12	12½	12½
Coal—Anthracite, per ton of 2,000 lb.....	3 00	3 50	3 00— 3 50	4 00	5 00	4 75	4 00
Bituminous, per ton of 2,000 lb.....							
Wood—Hard best, per long cord.....	2 50	3 00	3 00	3 00	3 50	3 50	4 00
Soft, per cord.....	2 50	3 00	3 00	3 00	3 50	3 50	4 00
Coal oil—Per gallon.....	40	35	35	30	30	30	30

NOTE.—1912 and 1913.....Fish—Halibut.  
1911.....Fish—White fish.



## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>Alberta—Lethbridge.</i>							
Beef—Sirloin steak, best, per lb.	10	10		15 -18	20	22	25-28
Medium chuck, per lb.	05	05		12½-18	15	17	16-18
Veal, forequarter, per lb.	12½	12½		10 -18	18	22	18-20
Mutton, hindquarter, per lb.	12½	12½		15 -20	23	25	22½-25
Pork—Fresh roasting, per lb.	10	10		12½-18	22	22	20
Salt, per lb.					20-25	18	18-20
Bacon, best smoked, per lb.	16	17		28	25-28	30	25-30
Fish—Fresh good quality, per lb.	15	15			15	15-20	15-20
Lard—Pure leaf, per lb.	15	15		20	20	18	15-18
Eggs—New laid, per dozen	40	40		60	60	60	60
Packed, per dozen				40	40	40	45
Milk—Per quart	10	10		08	10	10	10
Butter—Dairy tub, per lb.	30	30			30	35	30
Creamery prints, per lb.	35	35		35	40	40	40
Cheese—Canadian old, per lb.	20	20		20	20	25	20
Canadian new, per lb.	20	20		20	25	25	20
Bread—For 1 lb. loaf per lb.	05	05		05	05	05	05
Flour—Strong Bakers, per lb.	03	03½		03½	03½	03½	03½
Rolled Oats—Per lb.	05	04½		05	05	05	05
Rice—Good medium, per lb.	08	08		08	08	08	08
Beans—Hand picked, per lb.	05	05		05	06	06	07
Apples—Evaporated, per lb.	17½	12½		12½	20	12½	12½
Prunes—Medium quality, per lb.	12½	12½		15	20	15	12½
Sugar—Granulated, in \$ lots, per lb.	06½	06½		06½	08	08	06½
Yellow, in \$ lots, per lb.	06	06½		06½	07	07½	06½
Tea—Black medium, India or Ceylon, per lb.	40-50	40-45		50	40	40	40
Green medium, Japan, per lb.	40-45	40-45		50	40	40	40
Coffee—Medium mocha, per lb.	20	20		40	35	40	40-45
Potatoes—Per bag of 1½ bushels	1 00	1 00		1 85	1 25	90	1 25
Vinegar—White wine XXX, per quart	20	20		15	20	20	20
Starch—Laundry, per lb.	10	10		10	15	15	10-15
Coal—Anthracite, per ton of 2000 lb.							
Bituminous, per ton of 2000 lb.	3 75	3 75		4 25		5 00	4 25
Wood—Hard best, per long cord							
Soft, per cord					4 50		
Coal oil—Per gallon.	40	40		35	35	35	35

NOTE—All hardwood west of Ontario is poplar, tamarac, etc.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<i>Alberta.</i>							
Beef—Sirloin steak, best, per lb.	11	13.3	15	16.5	20.3	23.7	26.5
Medium chuck, per lb.	7.5	09	10	12.7	13.7	16.1	16.2
Veal, forequarter, per lb.	11.3	14.1	13.2	14.5	13.3	21.2	21.5
Mutton, hindquarters, per lb.	13.7	15.8	18	17.8	21.3	23.7	23.9
Pork—Fresh, roasting, per lb.	10	13.5	16.5	17.8	21.1	22.5	21.2
Salt, per lb.	10	12	20	30.2	19.5	19.2	18.7
Bacon, best smoked, per lb.	15	17	20	28.5	25.5	27.0	27.6
Lard—Pure leaf, per lb.	12.5	13	19.5	20.2	18.6	19.5	16.6
Eggs—New laid, per dozen.	35	36.6	52.5	53.3	56.6	55	56.2
Packed, per dozen.	27	27.5	37.5	40	40	41.2	41.2
Milk—Per quart.	7.5	07	9.1	9.3	10	10.4	10.5
Butter—Dairy tub, per lb.	25	28.1	27.5	30	30	33.2	33.7
Creamery prints, per lb.	30	31.6	35	35	38.3	41.2	39.3
Cheese—Canadian old, per lb.	20	18.3	20	19.3	21.3	23	21.2
Canadian new, per lb.	17.5	18	20	19.1	23.3	23	21.2
Bread—Per lb.	3.7	4.8	6.4	4.5	4.5	5	5.4
Flour—Strong Bakers, per lb.	3	3.2	3.2	3.2	3.5	3.6	3.5
Rice—Good medium, per lb.	7.5	7.3	5.5	6.0	7.1	7.7	7.5
Beans—Hand picked, per lb.	5.5	5.5	5	5.3	6.6	6.7	7.2
Apples—Evaporated, per lb.	13.7	12.0	14.0	13.5	15.1	13.7	13.1
Prunes—Medium quality, per lb.	11.2	10.8	10	11.5	14.1	13.7	11.5
Sugar—Granulated, in \$ lots, per lb.	05.6	06.1	6.6	6.3	7.4	7.1	6.5
Yellow, in \$ lots, per lb.	05.3	05.5	6.0	6.2	7.0	7.1	6.2
Tea—Black medium, India or Ceylon, per lb.	42.5	41.2	40	40.8	40.0	38.7	39.3
Green medium, Japan, per lb.	41.2	41.6	40	41.3	38.3	40.0	39.3
Coffee—Medium Mocha, per lb.	30	28.3	40	38.3	36.6	37.5	36.2
Potatoes—Per bag of 1½ bushels.	80	88.3	92.5	1 35.0	1 20.0	1 02.5	1 11.2
Vinegar white wine XXX, per quart.	20	20.8	20	16.6	18.3	17.5	16.2
Starch—Laundry, per lb.	11	10.6	11.2	10.6	14.0	12.5	11.8
Coal—Anthracite, per ton of 2000 lb.	3 37	3 62	5 12	6 25	9 25	5 91	3 93
Bituminous, per ton of 2000 lb.	3 75	4 00	6 50	5 37	6 75	6 75	6 50
Wood—Hard best, per long cord.							
Soft, per cord.	2 50	3 00	2 62	3 00	4 58	3 50	4 00
Coal oil—Per gallon.	40	40	37.5	33.3	33.3	35.0	35.0

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—Continued.

Locality and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia—Nelson.</i>							
Beef—Sirloin steak, best, per lb.....	20	18	15-18	20-22	25	28	30
Medium chuck, per lb.....	10	10	10-15	15	15-18	20	22
Veal, forequarter, per lb.....	20	18	10-16	15	15-20	16	16
Mutton, hindquarter, per lb.....	18	16	12-18	20-22	22-25	25	25
Pork—Fresh roasting, per lb.....	20	18	15-20	20	22-25	25	25
Salt, per lb.....	15	15	15-18	20	20	22	22
Bacon, best smoked, per lb.....	17	20	23-30	25-30	24-25	28	28-35
Fish—Fresh good quality, per lb.....		12	12½-18	12½-15	12½-20	15	15
Lard—Pure leaf, per lb.....	13	13	18-20	20-22	17½	25	25
Eggs—New laid, per dozen.....		60	50	75	65	80	75
Packed, per dozen.....	26	29	35-40	35	35	35	35
Milk—Per quart.....	10	10	12½	12½	12½	15	15
Butter—Dairy tub, per lb.....	20	22	30	35	30	30	30
Creamery prints, per lb.....	25	28	35	40	40	45	45
Cheese—Canadian old, per lb.....	15	18	20		20-25	20	20
Canadian new, per lb.....	15	18		20		20	20
Bread—For 1 lb. loaf, per lb.....	05	05				04½	04½
For 1½ lb. loaf, per lb.....			06½	06½	06½		
Flour—Strong Bakers, per lb.....	02½	03½	03½	03½	04	03½	03½
Rolled Oats—Per lb.....	03	04	03½	04½	05	05	05
Rice—Good medium, per lb.....	07	07½	08½	08½	08½	08½	08½
Beans—Hand picked, per lb.....	05½	06	08	08	08	08½	08½
Apples—Evaporated, per lb.....	12	12½	15	15	20	16	16
Prunes—Medium quality, per lb.....	08	10	10	10	12½-15	12½-15	12½
Sugar—Granulated, in \$ lots, per lb.....	06½	07	07	07	08-08½	07	07
Yellow, in \$ lots, per lb.....	06	06½	06	06	07-08	06	06
Tea—Black medium, India or Ceylon, per lb.....	40	40	50	50	35-50	35-50	50
Green medium, Japan, per lb.....	40	40	50	50	40-50	40-50	45
Coffee—Medium Mocha, per lb.....	40	40	40	40	40	40-50	30-60
Potatoes—Per bag, of 1½ bushels.....	1 50	1 25	1 75	2 50	2 00	2 00	1 25
Vinegar—White Wine XXX. per quart.....	20		20	20	25	25	25
Starch—Laundry, per lb.....	10		12½	12½	12½	12½	12½
Coal—Anthracite, per ton of 2000 lb.....		10 00	9 50	9 50	9 50	9 50	12 00
			10 00		10 00		
Bituminous, per ton of 2000 lb.....	12 00	8 00	7 00	7 00	7 50	7 50	8 75
			8 25	8 25			
Wood—Hard best, per long cord.....	8 25	4 50	6 00				6 50
Soft, per cord.....				6 00	6 00	6 00	
Coal oil—Per gallon.....	36.5	36.5	50	50	40-50	40-50	40

NOTE—1909 to 1912 ..... 100 lb. Bag potatoes.

1900 and 1905..... Coal oil..... \$3.65 per case of two 5 gallon cans.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia—New Westminster.</i>							
Beef—Sirloin steak, best, per lb. ....	22	25	20	25	22	25	25
Medium chuck, per lb. ....	12½	14	45	15	18	20	18
Veal, forequarter, per lb. ....	18	18	15	20	18	20	22
Mutton, hindquarter, per lb. ....	18	22	15-18	25	22	22	25
Pork—Fresh, roasting, per lb. ....	16	18	15	23	20	22	25
Salt, per lb. ....			12½-15	18	20	20	20
Bacon, best smoked, per lb. ....	25	25	30	35	33	33	35
Fish—Fresh, good quality, per lb. ....	08	10	15	15	12½-15	12½-15	12½
Lard—Pure Leaf, per lb. ....	14	16	20	22	18	19	20
Eggs—New laid, per dozen. ....	40	30	50-60	70	65	60	60
Packed, per dozen. ....	25	25	35-40	40	45	35	40
Milk—Per quart. ....	08	09	10	12½	11½	12½	12½
Butter—Dairy tub., per lb. ....	25	35	33½	40	28	35	
Creamery prints, per lb. ....	30	30	40-45	40	35-45	40	40
Cheese—Canadian, old, per lb. ....	15	16	20	20	25	25	30
Canadian, new, per lb. ....	15	16		20	25	25	25
Bread—For 1 lb. loaf, per lb. ....	05	06			06½		
For 1¼ lb. loaf, per lb. ....						05	05
For 1½ lb. loaf, per lb. ....			06½	06½			
Flour—Strong, Bakers', per lb. ....	02½	03	04	03½	03½	03½	03½
Rolled Oats—Per lb. ....	07	07	04½	05	05½	06	06
Rice—Good medium, per lb. ....	05	06	05-06	08	06	06½	08
Beans—Hand picked, per lb. ....	05	05	05-06	06	06	06	06
Apples—Evaporated, per lb. ....	10	12½	08½	12½	15	15	12½
Prunes—Medium quality, per lb. ....	05	08	06	08	12½	12½	15
Sugar—Granulated, in \$ lots, per lb. ....	05	06½	06	06½	07½	06½	06½
Yellow, in \$ lots, per lb. ....	05½	06	05	05½	06½	06½	06½
Tea—Black medium, India or Ceylon, per lb. ....	35	35	35-50	35	40	40	40
Green medium, Japan, per lb. ....	35	35	35-50	35	40	40	40
Coffee—Medium Mocha, per lb. ....	40	40	40-50	40	40	40	40
Potatoes—Per bag of 1½ bushels. ....	75	1 75	1 00	1 50	1 50	90	1 10
Vinegar—White wine XXX, per quart. ....	35	40	15	15	20	20	20
Starch—Laundry, per lb. ....	10	12½	12½	08	10	10	10
Coal—Anthracite, per ton of 2,000 lbs. ....	6 50	7 50	11 00				7 50
Bituminous, per ton of 2,000 lbs. ....			7 50	7 75	8 00	8 00	9 00
Wood—Hard, best, per long cord. ....			6 00				
Soft, per cord. ....	3 50	4 50		5 00	6 50	6 50	6 50
Coal Oil—Per gallon. ....	35	40	40	40	40	40	40

Note—

1911 and 1912..... Fish—Halibut.  
1913..... Fish—Halibut.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia—Vancouver.</i>							
Beef—Sirloin steak, best, per lb.	18-20	21	18-20	20	25	20-30	22-25
Medium chuck, per lb.	12-15	15	10	12½	15	15-20	16
Veal, forequarter, per lb.	18	20	11	15-18	20	20	22
Mutton, hindquarter, per lb.	18	20	17	20-23	25	25	20
Pork—Fresh, roasting, per lb.	18	20	15	25	22	22 25	22
Salt, per lb.	15	18	15-18	22	18	18-20	18
Bacon, best smoked, per lb.	25	27	25	35	35	25-27	32
Fish—Fresh, good quality, per lb.	10	10		15	15	15	15
Lard—Pure Leaf, per lb.	12	12	22	20	17	20	17
Eggs—New laid, per dozen.	35	35	55	65	65	75	65
Packed, per dozen.	20	25	40	35	35	45-40	45
Milk—Per quart.	08	10	10	10	11½	10	10
Butter—Dairy, tub, per lb.	25	25	30	28	25	30	25
Creamery prints, per lb.	30	30	35-45	35	35	30	40
Cheese—Canadian, old, per lb.	22	22	20	20	20	25	25
Canadian, new, per lb.	18	20		20	20	25	20
Bread—For 2 lb. loaf, per lb.	04	04					
For 1½ lb. loaf, per lb.			06½	06½	06½	05	05
Flour—Strong, Bakers', per lb.	03½	03½	03½	03½	03½	03½	03½
Rolled Oats—Per lb.	03	04½	04	05	04	04½	03
Rice—Good medium, per lb.	04	04	05	05	05	06½	05
Beans—Hand picked, per lb.	05	05	06	06	06	06½	06
Apples—Evaporated, per lb.	03½	08½	15	12	15	12½	15
Prunes—Medium quality, per lb.	05	05	08	10	10	12½	12
Sugar—Granulated, in \$ lots, per lb.	05	05	06	06	07	06½	06
Yellow, in \$ lots, per lb.	03½	03½	05	05½	06	06½	05
Tea—Black, medium, India or Ceylon, per lb.	25-50	25-50	40	35	35	35-60	32
Green medium, Japan, per lb.	30	30	35	40	40	50	35
Coffee—Medium Mocha, per lb.	30	30	40	35	40	40	33
Potatoes—Per bag of 1½ bushels.	1-00	1-00	1-25	1-75	1-60	1-00	1-15
Vinegar—White Wine XXX, per quart.	12	12	10	15	15	15	12½
Starch—Laundry, per lb.	06	06	10	10	10	10	07½
Coal—Anthracite, per ton of 2,000 lb.		9-00	12-00				
Bituminous, per ton of 2,000 lb.	6-50	6-50	7-50	7-50	8-00	7-50	7-50
						8-00	8-50
Wood—Hard, best, per long cord.			5-50	5-00	5-50		
Soft, per cord.	2-50	2-50			3-50		3-50
Coal Oil—Per gallon.	29	29	35	35	35	30	32

Note—1913. . . . . Soft Wood—Price per load.



RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Continued.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*—*Continued.*

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia.—Victoria.</i>							
Beef—Sirloin steak, best, per lb.	15	18	18-20	20	22	25	30
Medium chuck, per lb.	12½	15	10-12½	12½	15	15	18
Veal, forequarter, per lb.	12½-15	15-18	12½	15-10	20	20	25
Mutton hindquarter, per lb.	15	18-20	20	20	22	25	25
Pork—Fresh, roasting, per lb.	12½-15	15-17	20	20	20	25	25
Salt, per lb.	12½	15	18	20	20	20	20
Bacon, best smoked, per lb.	17	20	25-35	35	35	32	35
Fish—Fresh, good quality, per lb.	08-10	10-12½	10-12½	12	12½-15	12½-15	12½-20
Lard—Pure Leaf, per lb.	10	12½	21½	25	20	25	18
Eggs—New laid, per dozen	60	60	45	80	70	80	65
Packed, per dozen	30	35	35	40	35	35	35
Milk—Per quart.	09	10	12	10	12½	15	15
Butter—Dairy, tub, per lb.	22½	25	31	32	35	35	35
Creamery prints, per lb.	35	35	45	50	60	50	50
Cheese—Canadian, old, per lb.	30	20	20	20	25	30	30
Canadian, new, per lb.	15	18		20	25	25	25
Bread—For 1 lb. loaf, per lb.	05	05	06¼	06¼	06¼	06¼	06¼
Flour—Strong, Bakers', per lb.	04	04	03¾	04	05	05	04
Rolled Oats—Per lb.	05	05	06	05	05	05½	05½
Rice—Good medium, per lb.	06	06	06	06	08	08	08
Beans—Hand picked, per lb.	04	05	06	08	08	08	08
Apples—Evaporated, per lb.	10	12½	13	12½	12½	15	20
Prunes—Medium quality, per lb.	08	08	08	12½	15	15	15
Sugar—Granulated, in \$ lots, per lb.	06	06	06	07	08	07	06½
Yellow, in \$ lots, per lb.	05½	05½	05	06	07	06½	06½
Tea—Black medium, India or Ceylon, per lb.	40	40	40	40	40	40	40
Green medium, Japan, per lb.	50	50	60	50	50	50	50
Coffee—Medium Mocha, per lb.	40	40	35	40	40	40	40
Potatoes—Per bag of 1½ bushels.	90	1-00	1-25	1-90	2-25	1-00	1-25
Vinegar—White Wine XXX, per quart.	12½-20	15-25	20	15	15-25	15-25	15-25
Starch—Laundry, per lb.	08	08	10	08	08	10	10
Coal—Anthracite, per ton of 2,000 lb.	5 50	5 50	6 50	11 50	11 50	11 50	12 50
Bituminous, per ton of 2,000 lb.	6 50	6 50	7 50	7 50	7 50	7 50	6 50
Wood—Hard, best, per long cord.							
Soft, per cord.	4 50	5 00	6 50	6 00	6 00	6 50	6 50
Coal Oil—Per gallon.	30	30	35	50	35	50	40

## RETAIL PRICES, CANADA, 1900-1913—(inclusive)—Continued.

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*.—Continued.

Localities and Commodities.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia—Nanaimo.</i>							
Beef—Sirloin steak, best, per lb.	18	18	18	20	20	23	25
Medium chuck, per lb.	12½	15	15	18	15	18	20
Veal, forequarter, per lb.	15	15	15	16	16	22	23
Mutton, hindquarter, per lb.	20	19	18	22	23	25	28
Pork—Fresh roasting, per lb.	18	18	18	20	20	20	35
Salt, per lb.			20	20	20	24	20
Bacon, best smoked, per lb.	22-25	25	26	28	25	27	27
Fish—Fresh, good quality, per lb.	10	10	10	10	10	10	10
Lard—Pure Leaf, per lb.	15	15	20	19	18	18	18
Eggs—New laid, per dozen.	75	65	60	65	65	60	65
Packed, per dozen.	45	40	40	40	35	40	40
Milk—Per quart.	10	10	10	10	10	10	12
Butter—Dairy, tub, per lb.	30	30	30	30	30	35	35
Creamery prints, per lb.	35	35	45	45	40	40	40
Cheese—Canadian, old, per lb.	20	20	20	20	25	23	25
Canadian, new, per lb.	20	20			25	23	25
Bread—For 1½ lb. loaf, per lb.					06½	06½	
For 1½ lb. loaf, per lb.	03½	03½					06½
For 2 lb. loaf, per lb.			04½	04½			
Flour—Strong, Bakers', per lb.	03½	03½	03½	03½	03½	03½	03½
Rolled Oats—Per lb.	05	05	05	05	05	05	05
Rice—Good medium, per lb.	06	06	05	06	08	08	08
Beans—Hand picked, per lb.	05	05	06	08	08	08	08
Apples—Evaporated, per lb.	12½	12½	15	12½	15	12½	12½
Prunes—Medium quality, per lb.	12½	10	10	10	12½	10	12½
Sugar—Granulated, in \$ lots, per lb.	06½	06½	06	06½	07½	06½	06
Yellow, in \$ lots, per lb.	05½	05½	05½	05½	06½	05½	05½
Tea—Black medium, India or Ceylon, per lb.	40	40	35	40	40	40	40
Green medium, Japan, per lb.	50	50		40	40	40	40
Coffee—Medium Mocha, per lb.	40	40	35	40	40	40	40
Potatoes—Per bag of 1½ bushels.	75	1.00	1.25	1.75	2.00	1.25	1.25
Vinegar—White wine XXX per quart.	25	20	20	20	20	20	20
Starch—Laundry, per lb.	15	12½	12½	12½	12½	12½	12½
Coal—Anthracite, per ton of 2,000 lb.							
Bituminous, per ton of 2,000 lb.	4 00	4 00	4 50	4 50	4 50	4 50	5 00
Wood—Hard, best, per long cord.							
Soft, per cord.							
Coal Oil—Per gallon.	50	45	32	40	40	40	40

Note—Bituminous Coal..... Delivery Extra..... 75c and \$1.50.

RETAIL PRICES, CANADA, 1900-1913—(inclusive)—*Concluded.*

Prices of thirty-six commodities as on December 12th, 1900 to 1913, inclusive, in localities of 10,000 and over, collected by Correspondents to the *Labour Gazette*.—*Concluded.*

Recapitulation.	1900	1905	1909	1910	1911	1912	1913
<i>British Columbia.</i>							
Beef—Sirloin steak, best, per lb.....	18.4	20.0	18.7	21.2	22.8	25.2	26.7
Medium chuck, per lb.....	11.2	13.8	12.5	14.6	15.9	18.1	18.8
Veal, forequarter, per lb.....	16.1	17.5	13.3	16.0	18.3	19.6	21.6
Mutton, hindquarter, per lb.....	17.8	17.9	17.3	24.6	23.1	24.4	24.6
Pork—Fresh, roasting, per lb.....	17.1	18.0	16.8	21.6	21.1	23.1	26.2
Salt, per lb.....	14.1	16.0	17.5	20.0	19.6	23.0	20.0
Bacon, best, smoked, per lb.....	21.5	23.0	27.5	32.1	30.5	29.2	32.1
Lard—Pure leaf, per lb.....	12.8	13.9	20.5	21.4	18.1	21.4	16.3
Eggs—New laid, per dozen.....	52.5	50.0	53.0	71.0	66.0	71.0	66.0
Packed, per dozen.....	29.2	30.8	38.0	38.0	37.0	36.9	38.0
Milk—Per quart.....	9.0	9.8	10.9	11.0	11.4	15.5	12.9
Butter—Dairy, tub, per lb.....	24.5	27.5	30.8	33.0	29.6	33.0	33.0
Creamery, prints, per lb.....	31.0	31.6	39.5	42.0	43.0	43.5	43.0
Cheese—Canadian, old, per lb.....	18.4	19.2	20.0	20.0	24.5	24.6	26.0
Canadian, new, per lb.....	16.6	18.4	20.0	20.0	23.5	23.6	23.0
Bread—Per lb.....	4.4	4.6	6.0	5.9	6.3	5.3	5.3
Flour—Strong Bakers, per lb.....	3.0	3.3	3.6	3.8	4.0	3.9	3.5
Rolled Oats—Per lb.....	4.6	5.0	4.7	4.8	6.1	5.1	4.9
Rice—Good, medium, per lb.....	5.6	5.9	5.9	6.6	7.0	7.3	7.4
Beans—Hand picked, per lb.....	4.8	5.2	6.3	7.6	7.2	7.3	7.2
Apples—Evaporated, per lb.....	9.6	11.6	13.3	12.9	15.5	14.3	15.2
Prunes—Medium quality, per lb.....	7.7	8.2	8.5	10.1	13.3	13.0	13.4
Sugar—Granulated, in \$ lots, per lb.....	5.8	6.1	6.2	6.6	7.5	6.7	6.4
Yellow, in \$ lots, per lb.....	5.2	5.4	5.3	5.7	6.8	6.2	5.8
Tea—Black, medium, India or Ceylon, per lb.....	38.5	38.5	41.5	40.0	49.5	42.0	40.5
Green, medium, Japan, per lb.....	41.0	41.0	44.5	43.0	43.0	45.0	42.0
Coffee—Medium Mocha, per lb.....	38.0	38.0	39.0	39.0	40.0	41.0	35.6
Potatoes—Per bag of 1½ bushels.....	98.0	1.20.0	1.30.0	1.88.0	1.87.0	1.28.0	1.20.0
Vinegar—White Wine, per quart.....	20.6	23.0	17.0	17.0	20.0	20.0	19.5
Starch—Laundry, per lb.....	9.3	9.7	11.5	10.6	10.6	11.0	10.5
Coal Anthracite, per ton of 2,000 lbs.....	6.50	8.83	10.91	10.62	10.50	10.50	10.90
Bituminous, per ton of 2,000 lbs.....	5.70	6.12	6.82	7.07	9.00	9.50	6.87
Wood—Hard, best, per long cord.....	8.25	4.50	8.75	5.00	5.50	5.50	26.50
Soft, per cord.....	3.50	4.00	6.50	5.66	5.50	6.30	5.50
Coal oil—Per gallon.....	36.1	36.1	39.4	43.0	39.0	41.0	38.4

## NOTE "A."—PRICES OF CLOTHING.

It is difficult to measure changes in the price of clothing to the consumer on account of the lack of standardization both in finished product and materials.

From the wholesale list of Part I, it would appear that the advance in raw wool and woollens (the later including yarn, underwear and beaver cloth) since 1900 has been about 27 per cent; in raw cotton and cottons (the later including gray cotton, woven coloured fabrics, and prints) 35 per cent; and in leather 40 per cent. In raw silks there has been a decline of about 11 per cent. The three lines of boots and shoes quoted at wholesale have gone up about 50 per cent. To these data, the following tables showing (1) retail prices and costs of custom-made clothing in Ottawa, (2) manufacturers' prices and costs of ready-made clothing at Montreal, (3) manufacturers' prices and costs of boots and shoes in Quebec may be added:

## RETAIL PRICES AND COSTS OF STANDARD CUSTOM-MADE TWEED OR SERGE SUIT OTTAWA.

Costs.							Rent of store (per an- num.)	Percent- age of gen- eral over- head charges.
Year.	Selling Price.	Materials.		Wages.				
		Bellwarp serge, laid down.	Scotch Tweed laid down	Weekly rate of Wages		Labour, Cost of making suit.		
				Men Tailors.	Men Cutters.			
		Yd.	Yd.					
1890.....	\$20-25	\$2.10	\$2.00	\$10.00	\$20-25	\$5.00	\$1,000	10
1900.....	22-28	2.35	2.10	15.00	25-30	6.00	1,500	15
1913.....	25-33	2.75	2.25	20-25.00	30-40	7.50	3,000	20

NOTE.—The firm supplying the above has observed a growing tendency on the part of young men to demand more and better clothes and more up to date fashions than previously.

## MANUFACTURERS' PRICES AND COSTS OF READY-MADE CLOTHING AT MONTREAL.

Selling prices of overcoats and suits:—

Year.	Overcoats.			Suits.			
	Beaver.	Melton.	Frieze.	Serge.	Serge.	Tweed.	Fine Worsted.
1900.....	\$ 7.50	\$ 7.50	\$ 7.50	\$ 7.00	\$10.00	\$ 6.00	\$10.00
1905.....	8.50	8.50	8.50	7.50	11.00	7.25	11.00
1913.....	10.00	10.00	10.00	8.50	12.50	8.00	12.50

The cost prices of material in the above are shown in the following:—

Year.	Overcoats.			Suits.			
	Beaver.	Melton.	Frieze.	Serge.	Serge.	Tweed.	Fine Worsted
1900.....	\$0.85	\$0.85	\$0.90	2/3	3/8	1/11	3/8
1905.....	1.00	1.00	1.00	2/6	4/1	2/2	4/-
1913.....	1.10	1.10	1.10	2/-	4/4	2/5	4/6

Year.	LINING.		
	Body Lining.	Sleeve Lining.	Canvas Lining.
1900.....	10d	7d	3d
1905.....	4/-	8d	4d
1913.....	1/3	9d	5d

#### WAGES AND HOURS IN THE SAME ESTABLISHMENT.\*

Year.	Hours per week.	Wages.					
		Cutters.	Pressers.	Machine Male.	Hands. Female.	Hand Sewers.	
						Male.	Female.
1900.....	60	\$12-\$14	\$ 8-\$10	\$ 9-\$12	\$3.50-\$6	\$ 8-\$10	\$3.50-\$6
1905.....	55	14- 15	12- 14	13- 15	\$6-\$8	12- 14	\$6-\$8
1913.....	49	18- 20	15- 20	15- 25	10-12	15- 20	10-12

\*Other data with regard to wages and hours in ready-made clothing establishments will be found in Appendix No. 7.

NOTE.—The firm supplying the above data has stated that the demand is now for better goods, wider ranges of choice, and more frequent changes in style. The most important increase in costs has been under the heading of wages, but labour efficiency is improving.



## BOOTS AND SHOES, STANDARD LINES, MANUFACTURERS' PRICES AT QUEBEC.

## MEN'S WELTS.

Year.	Selling Price.	Costs.			
		Material & Lea Cost.	Wages Cost.	Factory.	Royalty.
	\$ cts.	\$ cts.	cts.	cts.	cts.
1897.....	1 90	1 23	37	09	04
1907.....	2 35	1 46	47	12	05
1914.....	2 65	1 58	62	14	06

## MEN'S McKAY.

Year.	Selling Price.	Costs			
		Material & Lea Cost.	Wages Cost.	Factory.	Royalty.
	\$ cts.	\$ cts.	cts.	cts.	cts.
1897.....	1 60	1 09	28	08	—
1907.....	2 00	1 30	38	11	01
1914.....	2 25	1 40	49	12	01½

## WOMEN'S WELTS.

Year.	Selling Price.	Costs			
		Material & Lea Cost.	Wages Cost.	Factory.	Royalty.
	\$ cts.	\$ cts.	cts.	cts.	cts.
1897.....	1 50	90	35	08	03
1907.....	1 85	1 05	46	10	04
1914.....	2 20	1 22	61	12	05

## WOMEN'S McKAY.

Year.	Selling Price.	Costs			
		Material & Lea Cost.	Wages Cost.	Factory.	Royalty.
	\$ cts.	\$ cts.	cts.	cts.	cts.
1897.....	1 25	79	26	07	—
1907.....	1 55	94	36	08	01
1914.....	1 90	1 14	47	10	01

NOTE "B."—WHOLESALE AND RETAIL PRICES, CANADA, 1900-1913, COMPARED.

The foregoing sections enable comparison in a general way to be made of the wholesale and retail price movements.

The general wholesale index number, for example, shows a rise of about 25 per cent between 1900 and 1913, while the retail number shows one of 33 per cent.

It is obviously unsatisfactory to regard such a comparison as final,—a comparison, that is, of findings based in the one case (wholesale) on 270 articles selected from the whole field of commerce, and in the other (retail) on 36 articles restricted to foods and fuel. As it is of importance to know with reasonable definiteness whether the retail trader in household necessities has merely followed the wholesale market in recent years or has added an impetus of his own, some further examination of the figures is called for.

Of the 36 articles covered in the investigation into retail prices, three (hard wood and soft wood, as fuel, and black tea) are unrepresented in the wholesale list. For the rest, the wholesale prices of the same or approximately the same commodities are available. In the accompanying table the two sets of prices for each of these articles are assembled side by side so as to enable comparison of the trend as between the two to be made at a glance. Thus the course of beef, hindquarters, wholesale, at Toronto is shown side by side with that of the average price of sirloin steak, at retail, in the fifty-seven cities. Beef, forequarters, at wholesale, is similarly compared with medium chuck roasting beef at retail, and so on. A summary index number has been worked out for all the food-stuffs, and for the fuel and lighting group, as well as for the list as a whole. These summary index numbers have been weighted to represent the relative importance of the several articles in consumption, each unit in the weight representing roughly 10 cents expenditure weekly.<sup>1</sup> Charts have been made of the final results.

On the whole the advance in retail prices has not been so pronounced as in wholesale. This is in accordance with the usual experience, namely, that retail prices follow wholesale somewhat slowly and are not subject to violent variation either up or down. For the whole list wholesale prices have gone up 46·1 per cent since 1900, and retail prices by 40·2 per cent. For the list of 27 foods alone, the advance is 50·8 per cent in the case of wholesale and 42·3 per cent in the case of retail prices. A few cases may be noticed in the table in which retail prices have advanced more rapidly than wholesale. Sirloin steak, retail, has apparently advanced a little more than hindquarters at wholesale. On the other hand, chuck roasting beef at retail has not gone up as fast as forequarters at wholesale, possibly because of the fact that poorer qualities of meats have been less in demand. Packed eggs seem to have gone up faster at retail than at wholesale, but this may be due to uncertainty in the statistics resulting from the fact that this commodity is on the market at varying intervals. It must be remem-

<sup>1</sup>The weights used are as follows:—

Beef, best.. . . .	4	Flour.. . . .	4
" medium.. . . .	3	Rolled oats.. . . .	3
Veal.. . . .	2	Rice.. . . .	1
Mutton.. . . .	2	Beans.. . . .	1
Pork, fresh.. . . .	2	Apples, evaporated.. . . .	1·5
" salt.. . . .	3	Prunes.. . . .	1·5
Bacon.. . . .	3	Sugar, granulated.. . . .	3
Lard.. . . .	3	" yellow.. . . .	1
Eggs, fresh.. . . .	4	Tea.. . . .	2
" packed.. . . .	3	Coffee.. . . .	1
Milk.. . . .	6	Potatoes.. . . .	6
Butter, dairy.. . . .	4	Vinegar.. . . .	1/100
" creamery.. . . .	6	Coal, anthracite.. . . .	10
Cheese.. . . .	4	" bituminous.. . . .	8
Bread.. . . .	6	Coal oil.. . . .	2

These weights are derived by rough calculation from the budget quantities shown in the table appearing on p. 137.

bered throughout that the wholesale prices are averages for the year whereas the retail are December prices.<sup>1</sup>

<sup>1</sup>On the subject of wholesale as a compared with retail prices and the difficulty of securing adequate data therefor, Mr. R. H. Hooker (Journal of the Royal Statistical Society, Dec., 1911, p. 35) offers the following table and observations:—

## COMPARISON OF WHOLESALE AND RETAIL FOOD PRICES.

(Base 1895-1904 = 100.)

Year.	UNITED KINGDOM		FRANCE					GERMANY		UNITED STATES	
	Whole-sale Board of Trade	Retail Board of Trade..	Whole-sale (I)	Retail (II).	Retail (III).	Retail (IV).	Retail (V).	Whole-sale Hooker.	Retail Board of Trade.	Whole-sale Bureau of Labour.	Retail Board of Trade.
1890.....	110	.....	117	109	107	110	101	110	.....	108	.....
1891.....	118	.....	110	112	108	113	105	119	.....	114	.....
1892.....	112	.....	105	110	113	112	104	113	.....	102	.....
1893.....	110	.....	102	104	106	109	98	109	.....	107	.....
1894.....	103	.....	98	103	109	109	104	101	.....	96	.....
1895.....	100	94	94	99	100	104	102	94	98	92	96
1896.....	94	93	94	99	97	102	99	88	96	82	93
1897.....	98	97	98	102	97	104	96	93	99	88	94
1898.....	103	102	99	101	103	105	101	102	101	94	96
1899.....	99	97	98	102	104	107	103	100	99	98	97
1900.....	100	101	102	102	101	104	98	102	100	104	99
1901.....	101	103	107	102	103	101	98	103	101	106	102
1902.....	102	103	107	98	99	89	100	101	103	115	108
1903.....	101	104	106	99	97	91	102	108	102	109	107
1904.....	102	105	99	93	98	94	102	108	101	111	110
1905.....	102	105	102	88	98	88	107	113	108	112	111
1906.....	101	104	109	92	99	86	107	115	114	114	114
1907.....	106	107	115	98	99	80	112	121	116	121	118
1908.....	107	110	122	99	103	91	114	113	119	123	.....
1909.....	109	109	122	96	105	90	109	125	120	127	.....
1910.....	110	111	.....	.....	.....	96	114	128	.....	131	.....
1911.....	.....	110	.....	.....	.....	.....	.....	.....	.....	.....	.....

(I) Import Value; same commodities as (II) and (III).

(II) Assistance publique.

(III) Economat.

(IV) Normal expenditure of a working-class family.

(V) Idem, without sugar and wine; (I) and (II) include coal and lamp-oil in addition to food.

I have ventured to make a comparison between the wholesale prices of food in the country, as ascertained above, and these retail prices, although, of course, the comparison is largely vitiated by the commodities not being really the same, nor weighted in the same manner. Very little reliance can accordingly be placed upon the result. *A priori*, we should expect the curve of retail prices to be, upon the whole, distinctly smoother than that of wholesale prices; and this is apparently the case at New York, whereas the British series show very little difference between the two. The figures suggest that the retail index number has risen somewhat more than the wholesale in recent years in this country, which is contrary to theoretical anticipation; this conclusion is quite illusory, and merely due to the selection of the standard. In the United States the retail curve is much the smoother, not falling so low as the wholesale in 1896-97, and lagging behind in 1907. Moreover, the different plan on which the wholesale and retail index numbers have been formed is quite sufficient to account for very considerable variations. All that can be safely said here is, I think, that since 1895 retail prices of food have risen as much as wholesale in this country, but that in the United States they appear to have lagged behind (until 1907).

"Reverting now to the French wholesale and retail prices, quoted in the *"Salaires et Coût de l'existence,"* these show an index number for eight articles of food (bread or flour, butter, cheese, potatoes, rice, oil for food, wine, sugar,—the absence of meat is noticeable), plus coal and lighting-oil, first at import values (wholesale prices); secondly, contract prices paid by the *"Assistance publique"* and, thirdly, the prices charged by two *economats* (that is, co-operative associations of employees of two railway companies) to their members, these last being retail prices at Paris, all octroi paid. These three sets thus represent three stages in the sale of goods. The number of commodities is extremely small, and the data thus apply to but a fraction of the provisions usually purchased by a family; still, the unexpected conclusion is reached that while import values have risen 20 per cent since the average of 1895-1904, the other prices have scarcely risen at all. This is only another example of the difficulty of drawing conclusions, and

## INDEX NUMBER OF PRICES, WHOLESALE AND RETAIL, 1900-1913.

		1900	1905	1909	1910	1911	1912	1913
<i>Foods.</i>								
Beef.....	hindquarters, wholesale.....	100	84.0	118.9	144.9	140.4	163.8	162.5
	sirloin steak, retail.....	100	111.8	123.9	138.2	139.6	158.0	171.3
Beef.....	forequarters, wholesale.....	100	108.9	126.8	161.8	150.9	172.6	235.6
	chuck roast, retail.....	100	125.5	120.4	130.6	136.7	150.0	163.1
Veal.....	dressed, wholesale.....	100	101.0	115.8	125.1	121.8	126.2	143.0
	roast, foreq't'r, retail.....	100	113.0	116.0	127.0	138.0	153.0	167.0
Mutton.....	dressed, wholesale.....	100	146.5	152.1	140.3	130.6	143.3	160.6
	roast, leg, retail.....	100	103.3	123.8	142.3	141.5	153.3	162.7
Pork, fresh.....	dressed hogs, wholesale.....	100	121.2	148.9	166.0	136.8	156.4	185.1
	roast, ham, retail.....	100	106.5	133.3	139.8	136.5	151.2	166.6
Pork, salt.....	mess, wholesale.....	100	110.5	141.9	162.6	129.7	142.2	164.7
	mess, retail.....	100	114.6	147.7	149.5	144.0	153.2	167.8
Bacon.....	breakfast, wholesale.....	100	117.5	127.6	165.4	130.9	138.4	160.6
	breakfast, retail.....	100	115.6	142.8	157.7	146.7	138.9	168.8
Lard.....	pure, wholesale.....	100	100.1	149.8	165.3	121.6	144.6	154.3
	pure, retail.....	100	107.6	146.5	148.8	128.9	144.2	140.4
Eggs.....	fresh, wholesale.....	100	121.3	150.9	152.6	155.1	184.4	199.9
	fresh, retail.....	100	116.7	162.6	173.9	177.8	182.8	192.2
Eggs.....	packed, wholesale.....	100	123.5	164.9	161.6	151.0	183.6	173.7
	packed, retail.....	100	115.8	157.4	158.4	163.3	175.2	185.1
Milk.....	Wholesale.....	100	100.5	114.5	116.4	126.2	139.7	141.4
	retail.....	100	108.2	124.6	132.8	127.8	147.5	149.1
Butter.....	creamery, solids, wholesale.....	100	102.0	114.0	119.4	112.9	131.9	132.7
	creamery prints, retail.....	100	108.6	125.5	125.5	136.8	145.1	138.8
Butter.....	dairy, prints, wholesale.....	100	112.9	121.8	127.4	125.7	155.4	145.4
	dairy solids, retail.....	100	111.8	121.7	120.3	132.1	144.8	135.7
Cheese.....	Canadian, wholesale.....	100	99.9	107.6	113.5	112.2	124.1	114.0
	Canadian old, retail.....	100	109.3	110.5	113.0	124.2	131.0	124.2
Bread.....	plain, white, wholesale.....	100	144.2	155.7	153.8	145.5	143.9	152.3
	plain, white, retail.....	100	105.4	118.8	116.2	118.8	116.2	116.2
Flour.....	family, wholesale.....	100	131.1	143.1	137.2	124.8	131.9	127.9
	family, retail.....	100	112	128	132	136	136	132
Oatmeal.....	standard, wholesale.....	100	144.0	80.7	69.6	73.0	76.2	69.6
	rolled oats, retail.....	100	108.3	119.4	113.9	122.2	125.1	119.4
Rice.....	patna, wholesale.....	100	107.7	115.3	117.0	121.5	118.0	131.6
	medium, retail.....	100	101.9	103.8	101.9	105.7	103.8	111.5
Beans.....	handpicked, wholesale.....	100	103.6	131.1	141.4	125.3	170.3	147.8
	handpicked, retail.....	100	109.3	125.6	127.9	125.6	141.8	134.8
Apples.....	evaporated, wholesale.....	100	61.6	62.8	53.2	87.8	96.6	86.0
	evaporated, retail.....	100	77.7	115.1	122.2	135.3	131.3	125.2
Prunes.....	medium, wholesale.....	100	75.0	112.5	95.4	122.7	136.4	115.9
	medium, retail.....	100	83.4	85.2	94.7	108.7	108.7	106.0
Sugar.....	granulated, wholesale.....	100	110.7	100.4	183.8	108.9	113.2	97.9
	granulated, retail.....	100	101.8	105.5	102.9	127.7	116.6	101.8
Sugar.....	yellow, wholesale.....	100	109.9	105.9	109.8	110.5	115.3	98.0
	yellow, retail.....	100	98	100	106	124	118	108
Tea.....	green, Japan, wholesale.....	100	109.2	134.7	133.0	131.5	132.3	139.7
	green, retail.....	100	99.1	104.2	105.1	107.4	106.0	106.5
Coffee.....	Rio, wholesale.....	100	104.1	86.9	124.0	183.2	218.8	189.4
	medium, retail.....	100	101.4	91.6	104.3	104.3	109.5	108.9

is, I suspect attributable to reductions in octroi or Customs duties on certain articles, such as wine or sugar. As instancing the enormous difference that may arise—when dealing with a few articles only—I also reproduce two columns from the same work of the Ministère du Travail showing the “normal” annual expenditure on food of a workman's family of four persons at Paris. Only thirteen articles are taken (bread, meat, fresh vegetables, potatoes, haricots, sugar, milk, butter, cheese, rice, fruits, wine, coffee) and these are weighted according to an estimated ideal rate of consumption based upon medical research. It will be seen that the food index number (base 1895-1904), is much lower, reaching in 1910 only 96. If, however, two articles—sugar and wine—are excluded, the index number of the remaining eleven articles shows a rise to 114 in 1910. The latter curve shows a much more reasonable resemblance to wholesale prices. Such considerations as these convey a vivid idea of the difficulty of arriving at a true estimate of the change in the cost of living.”

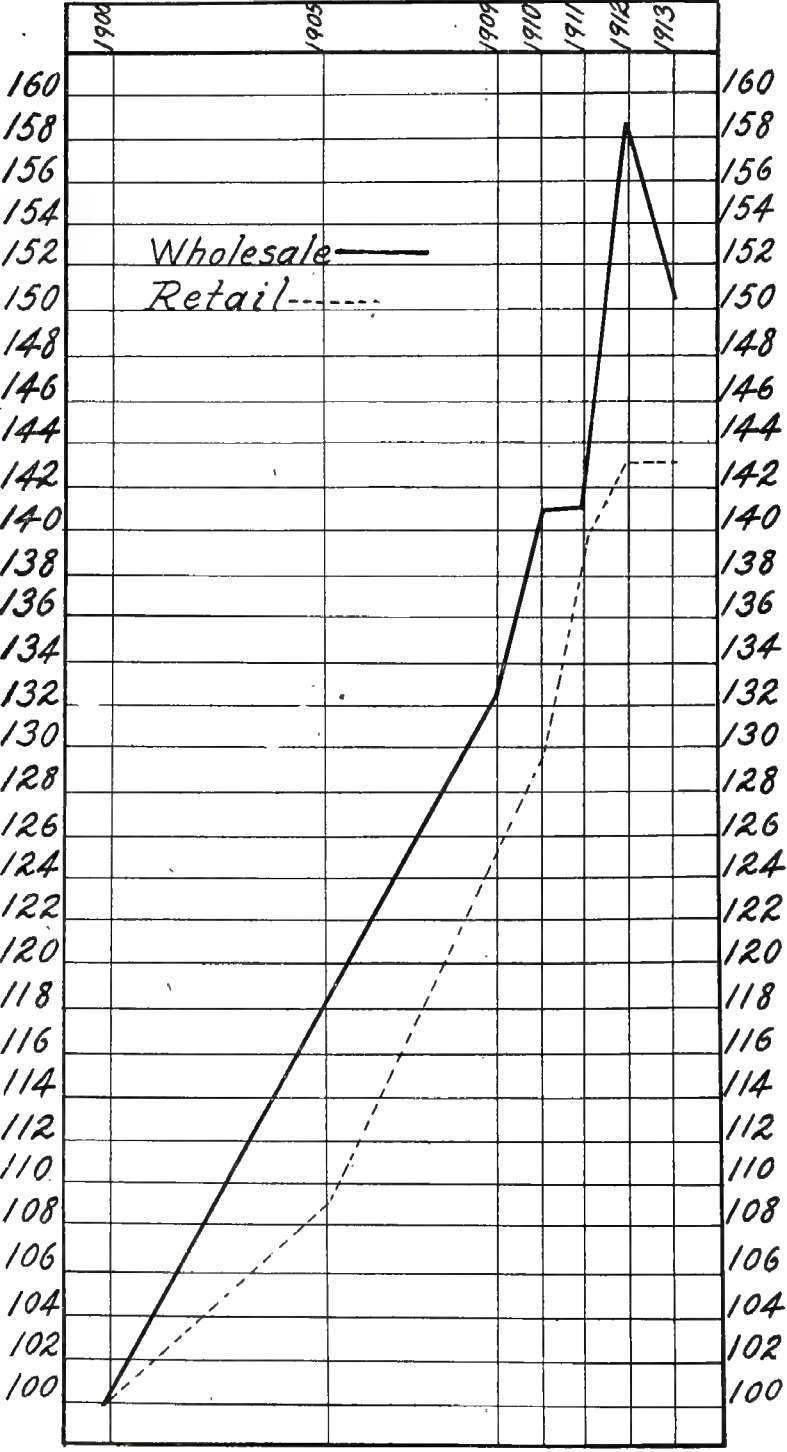
See U.S. Senate Document 601 of the 61st Congress, 2nd session, on the prices paid by consumers and retail dealers to wholesalers and producers for eggs, butter, milk and chickens. See also various bulletins of the U.S. Department of Labour “Retail Prices and Cost of Living Series,” e.g., “Wheat and flour prices from Farmer to Consumer,” etc., etc

## INDEX NUMBER OF PRICES, WHOLESALE AND RETAIL, 1900-1913—Continued.

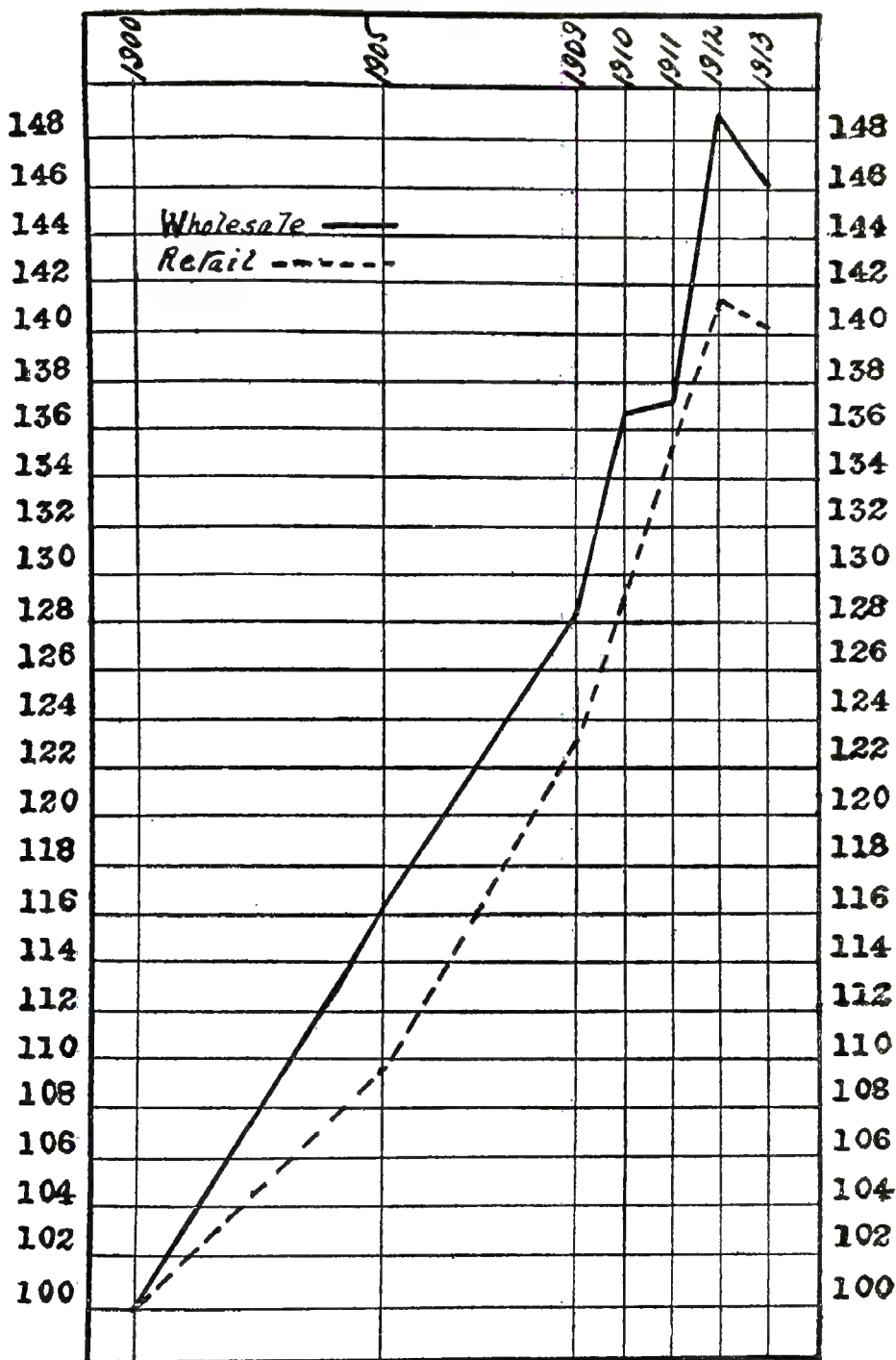
		1900	1905	1909	1910	1911	1912	1913
<i>Food—Continued.</i>								
Potatoes.....	{ wholesale.....	100	186.9	201.7	194.3	306.9	347.1	201.4
	{ retail.....	100	116.1	113.5	122.3	195.4	152.5	153.1
Vinegar.....	{ white wine, wholesale.....	100	87.5	71.8	75.5	68.7	75.0	75.0
	{ white wine, retail.....	100	100.8	100.0	100.8	102.6	105.8	104.1
All foods.....	{ wholesale.....	100	118.1	132.2	140.9	141.2	158.2	150.8
	{ retail.....	100	109.4	124.8	129.8	138.8	143.2	143.3
<i>Fuel and Lighting.</i>								
Coal.....	{ anthracite, wholesale.....	100	115.7	113.8	122.7	127.4	127.4	135.1
	{ anthracite, retail.....	100	114.4	120.7	119.0	115.7	140.7	134.5
Coal.....	{ bituminous, wholesale.....	100	105.2	115.7	124.5	122.8	123.7	124.5
	{ bituminous, retail.....	100	103.6	117.6	122.4	116.6	129.2	101.9
Coal oil.....	{ Canadian, wholesale.....	100	108.3	103.3	87.7	81.4	90.5	102.2
	{ Canadian, retail.....	100	102.0	100.4	99.1	96.6	99.1	99.1
All.....	{ wholesale.....	100	116.6	128.5	136.1	137.2	149.0	146.1
	{ retail.....	100	109.8	123.2	129.0	135.4	141.3	140.2



WHOLESALE AND RETAIL PRICES FOODS, CANADA, 1900-1913.



WHOLESALE AND RETAIL PRICES OF FOODS (27 ARTICLES) AND FUEL AND LIGHTING (3 ARTICLES), CANADA, 1900-1913.



## APPENDIX No. 4.

*Exhibit contributed by Department of Labour, Canada, through Mr. R. H. Coats.*

## COMMODITY PRICES IN OTHER COUNTRIES.

It is frequently observed that the recent rise in prices has not been peculiar to Canada, but has been practically world wide. It is most important to discover in the present connection to what extent this is the case—whether or not any strong general tendency is apparent, working to a certain extent at least, irrespective of country, and making for approximate uniformity, or if price movements have been materially different in different countries, and in what these differences broadly consist.<sup>1</sup>

As time and means were not available for independent inquiry in other countries, the analyses given in the following pages are based on the data of previous investigators—consisting for the most part of official reports, though computations by well known private statisticians were used in several cases. These records are brought up to date wherever possible by correspondence, and an attempt made to present a fairly comprehensive digest and comparison of their findings, with as much of detail as space would permit. Increased attention has in recent years been paid to the collection of price statistics, so that at present there is scarcely a country of importance in which the movements of prices are not being more or less accurately measured. There is the difficulty, of course, that the statistics are not always on a uniform basis, and that even where they are thus uniform, the conditions of living differ so widely as to make direct comparisons but seldom possible. General trends, however, may be distinguished with some clearness.<sup>2</sup>

<sup>1</sup>The natural tendency of the price-movement is, of course, towards uniformity, as Irving Fisher points out: "International trade gives present-day problems of money and of price level an international character. If all countries had their own irredeemable paper money and no money that was acceptable elsewhere, price levels in different countries would have no intimate connection. Indeed the connection is actually slight as between countries which have different metallic standards; for example, between a gold-basis and a silver-basis country. But where two or more nations trading with each other use the same standard there is the tendency for the price level of each to influence profoundly the price level of the other. The price level in a small country like Switzerland depends largely upon the price levels in other countries." (*Why is the Dollar Shrinking*, p. 105.)

<sup>2</sup>The most useful recent collection of comparative price statistics is contained in the series of reports issued by the United Kingdom Board of Trade, on "Working Class Rents, Housing and Retail Prices, together with Rates of Wages," between 1905 and 1912. The reports, which are based in each case on evidence of a very comprehensive character, are six in number. The first deals with conditions in the United Kingdom as in 1905, the evidence being based on data from eighty-eight localities. (Cd. 3864.) In the second, third, fourth and fifth reports, respectively, conditions prevailing in Germany, France, Belgium and the United States were dealt with on a similarly comprehensive plan. (Cd. 5065. Cd. 4512. Cd. 5609.) Although some time elapsed between the conclusion of the United Kingdom inquiry and those relating to foreign countries, the results are valuable for purposes of comparison. Finally, in 1912, seven years after the original investigation the inquiry was duplicated in the United Kingdom, with the object of noting the extent to which rents, prices and wages had changed in the interval. In an appendix to this report, the course of prices in several foreign countries (Austria-Hungary, Belgium, France, Germany, Holland, Italy, Japan, Norway, Russia and the United States), and British Dominions over seas (Canada, Australia and New Zealand) were dealt with, index numbers for a number of commodities in each being quoted from 1900 and earlier to the present. The entire series of reports is easily the most valuable study of the kind that has been made in recent years. The statistics herewith are largely taken therefrom, though the original sources have been consulted and the figures in as many cases as possible brought up to date.

Another important collection of recent index numbers may be found in a Bulletin of the International Statistical Institute (Volume XIX) issued in 1912. This also has been drawn upon in the present statement.

In 1912 appeared the comprehensive results of an investigation made by a Select Committee of the United States Senate, relative to wages and prices of commodities in the United States

## SCOPE AND ARRANGEMENT OF DATA.

The countries for which comparative statistics are here assembled are as follows: (1) The United Kingdom, (2) the United States; (3) other British Dominions—Australia, New Zealand, South Africa, and India; and (4) the following other foreign countries; France, Germany, Austria-Hungary, Italy, Belgium, Holland, Denmark, Norway, Russia and Japan.

For each of the countries named there will be found immediately below a general presentation of the available statistics on the trend of prices since 1900, with a commentary as to their significance in relation to the similar statistics of Canada. In order to facilitate comparisons throughout, all index numbers have been reduced to a common basis, prices in 1900 being made equal to 100.<sup>1</sup> The official index numbers for Canada thus altered are given for purposes of reference and comparison herewith (see pp. 230-233 inc.).

and other countries. "This four volume report," says the Librarian of Congress, "is a compendium of information on the recent tendencies in the movement of prices, wages, and the general problem of the increased cost of living. While it shows some evidences of haste in its preparation, it is nevertheless the most important and most usefull American study of prices and the cost of living which has appeared since the 1903 report of the United States Bureau of Labour. Its value of course rests in the great variety of statistical information presented—in fact it forms a cyclopedia of price and wage data." (U.S. Congress Senate. Select Committee on wages and prices of commodities. Investigation relative to wages and prices of commodities... Washington, Govt. Print. Off., 1911. 4 v. 231 cm. (61st Cong., 3rd sess. Senate, Doc. 847). Contents.—I. Report, and views of minority.—II. Hearings, and digest of evidence.—III. wages and prices in United States and abroad.—IV. Wholesale and retail prices in United States and abroad, and index.)

A valuable article on the subject ("The Course of Prices at Home and Abroad, 1890-1910") is that of Mr. R. H. Hooker, M.A., which appeared in the Journal of the Royal Statistical Society for December, 1911.

The enlargement and improvement which has taken place in official statistics of prices during recent years is well illustrated by comparison of the above with the data available for the Royal Commissions on the Depression of Trade and Industry and on the Relative Value of the Precious Metals appointed during the eighties.

A list of the more important publications on the subject of the cost of living was recently published by the U.S. Library of Congress.

On the difficulties of instituting international comparisons the Economic Commission of South Africa says (Report, p. 12):—

"No more awkward problem could be set than that of instituting an international comparison of costs of living. People do not live in the same way all the world over, and consequently the standard of living in one country is not a satisfactory basis for comparison with that in another country. Needs may not be the same in two different countries because of climatic and other differences; and, in view of the relative prices of things in the places compared, a commodity consumed largely in one of them may figure only to a slight extent in the budgets of another. In short, what has to be attempted is an international measurement of the cost of equal comfort, the patent fact being admitted that under diverse climatic and other conditions comfort is attained in different ways."

<sup>1</sup>Except in a few cases where the earliest returns were for 1901; here 1901 prices are equal to 100.

Percentage comparisons based on index numbers instead of actual prices are, of course, only roughly accurate. In order that index numbers may be thoroughly "reversible" (i.e., may yield the same results as the original data), it is pointed out by Mr. G. H. Knibbs, that either the geometric mean must be used or an "aggregate consumption" system of weights adopted. (See Prices, Price Indexes and Cost of Living in Australia, by G. H. Knibbs, C.M.G., 1912, pp. 14, 35, 48, and appendix VIII.) On this point Mr. Hooker says (Journal of Royal Statistical Society, December, 1911, p. 3-4): "Strictly speaking each item ought to be reduced to the standard, and the new percentages added to form the group—or total—index number. The difference in the most extreme case, is only a matter of 2 or 3 per cent, at the outside, an error by no means greater than the possible error due to the selection of different commodities or systems of weighting." Mr. Hooker adds, therefore, that differences of 5 per cent or even 15 per cent, between one set of figures and another may be of no moment, being due to differences in the method of constructing the index numbers.

## THE COURSE OF PRICES IN CANADA 1890-1913.

INDEX NUMBERS OF CANADIAN PRICES, WHOLESALE AND RETAIL (PRICES 1900=100.)

## WHOLESALE PRICES.

## V. Miscellaneous Foodstuffs.

Year.	Fruits and Vegetables.										Tea, Coffee, Chocolate.	Sugar, molasses, glucose, honey, maple sugar.	Condiments. (Salt, pepper, vinegar, soda, cream of tartar.)	Total. Miscellaneous Foods. (49)
	I Grains and Fodders. (Wheat, oats, barley, corn, rye, flax, peas, hay, straw, bran, shorts.)	II. Animals and Meats. (Cattle, sheep, swine and their products, poultry.)	III. Dairy Products. (Milk, butter, cheese, eggs.	IV. Fish. (Cod, haddock, halibut, lobster, mackerel, herring, whitefish, salmon, trout, canned salmon.)	Fresh Fruits Native (Apples, pears, plums, peaches, grapes, cherries, raspberries, strawberries.)	Fresh Fruits Foreign. (Bananas, lemons, oranges.)	Fresh Vegetables (Potatoes, beans, tomatoes, turnips, tomatoes.)	Dried Fruits. (Apples, prunes, currants, raisins.)	Canned Vegetables. (Peas, corn, tomatoes.)	Breadstuffs. (Flour, bread, biscuits, oatmeal, rice, tapioca.)				
1890.....	116.8	107.5	94.4	97.0	124.3	102.8	119.2	109.9	129.8	116.4	147.8	135.9	119.9	124.7
1891.....	124.0	101.2	97.4	85.1	131.3	95.0	133.1	120.0	139.1	121.4	149.4	122.7	118.5	125.8
1892.....	106.8	104.9	97.0	85.1	126.9	97.5	103.1	86.7	115.6	109.5	140.8	96.2	104.8	108.6
1893.....	99.1	104.1	101.2	93.7	116.6	82.9	122.7	85.5	101.5	100.2	139.0	101.0	99.5	105.9
1894.....	94.3	95.4	95.9	90.6	107.0	89.2	105.4	78.8	96.4	93.8	134.9	91.0	95.5	98.5
1895.....	98.8	89.1	86.9	95.3	119.5	93.1	102.9	67.2	98.2	100.4	132.8	86.3	95.9	98.7
1896.....	95.2	79.6	82.6	96.4	89.5	87.6	75.8	62.6	89.1	95.1	125.5	91.6	91.3	90.3
1897.....	80.6	87.4	82.6	92.6	85.7	84.2	77.0	73.7	81.3	104.8	115.4	78.4	91.7	89.2
1898.....	98.8	93.6	85.2	93.6	93.2	89.9	96.5	93.4	102.2	109.0	101.1	90.3	94.3	97.9
1899.....	96.7	91.9	83.0	103.3	100.1	82.9	108.5	94.9	95.9	96.4	96.2	100.6	93.6	97.0
1900.....	100.0	100.0	100.0	106.3	113.8	86.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	107.4	107.6	110.5	106.3	113.8	86.0	121.2	103.8	93.9	100.7	102.0	105.8	98.0	102.2
1902.....	116.2	118.1	98.0	103.5	110.4	83.4	140.2	94.6	101.5	155.1	100.3	97.1	97.6	102.0
1903.....	106.6	114.0	99.9	109.2	90.1	114.0	146.1	83.0	122.3	152.9	104.3	90.5	97.8	101.7
1904.....	115.6	107.6	98.3	112.3	110.4	81.7	152.1	76.6	126.6	174.1	106.6	96.6	96.1	105.6
1905.....	116.5	116.7	105.5	108.7	110.5	86.8	143.9	76.7	113.5	175.3	107.7	98.9	96.1	104.4
1906.....	125.8	125.8	120.6	114.4	130.1	92.2	123.6	92.6	96.7	169.1	102.3	104.8	115.2	106.9
1907.....	140.3	134.2	120.0	121.7	152.2	91.8	132.7	115.1	107.8	188.0	103.2	112.5	95.1	116.7
1908.....	148.4	125.3	125.0	113.2	129.4	86.5	138.5	99.3	110.7	199.3	110.6	114.7	90.4	114.4
1909.....	150.0	143.7	122.5	125.9	120.4	83.0	134.9	90.1	101.7	198.1	114.5	113.2	85.2	111.6
1910.....	148.8	148.2	124.4	136.3	122.2	87.6	133.9	86.2	104.8	124.2	123.2	112.4	94.5	115.4
1911.....	148.5	141.7	124.9	134.9	129.0	80.6	170.6	118.0	140.3	127.2	143.0	111.9	96.2	123.1
1912.....	155.5	155.5	145.8	146.3	122.9	82.0	200.7	109.5	142.4	132.7	154.4	116.9	101.0	130.7
1913.....	136.9	174.8	141.9	139.5	118.3	96.0	158.4	98.6	118.7	130.5	146.8	113.3	114.1	121.7



## VI. TEXTILES.

## VII. HIDES, LEATHER, BOOTS AND SHOES.

Year.	Woolens. (Wool, yarn, under- wear, Beaver Cloth.)	Cottons. (Raw cottons, grey cottons, woven, coloured fabrics.)	Silks. (Raw silk, spool, twist, machine twist).	Jute. (Jute, raw hessians.)	Linens. (Tow flax sewing flax rope).	Oil cloths, (Floor, table.)	All textiles.	Hides and Tallow. (Cowhides, calf skins, horse hides, tallow.)	Leather. (Spanish sole, slaughter, sole, harness upper).	Boots and Shoes. (Mens split, Mens box calf, womens dongola.)	All hides, etc.
1890.....	102.3	108.9	121.6	94.7	67.6	125.1	111.4	88.5	84.9	92.7	88.4
1891.....	96.6	106.1	104.7	88.9	62.3	128.0	104.2	88.4	89.9	92.7	90.1
1892.....	91.7	96.5	107.8	102.6	59.3	120.0	102.2	85.6	86.7	92.0	87.6
1893.....	93.3	96.0	110.5	91.0	63.1	107.2	101.2	83.0	92.1	92.0	89.4
1894.....	92.6	91.3	93.7	89.4	70.7	98.4	97.3	66.4	83.3	91.3	78.9
1895.....	100.3	87.9	98.5	82.2	53.4	93.4	93.6	78.9	91.4	91.3	86.6
1896.....	100.6	90.7	93.6	87.7	65.5	93.4	96.9	67.8	88.7	92.0	81.6
1897.....	102.2	87.0	94.0	82.2	73.9	91.3	98.0	84.6	88.5	92.0	87.9
1898.....	94.7	84.0	95.8	79.3	75.4	85.8	95.2	90.9	93.8	92.0	92.2
1899.....	88.5	84.9	105.5	88.2	90.5	83.3	99.8	96.1	94.8	96.0	96.1
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	85.6	100.8	90.3	98.1	97.6	98.3	103.6	96.4	98.6	103.6	99.1
1902.....	81.8	99.2	93.9	89.2	94.2	95.6	101.0	104.2	102.3	105.2	103.8
1903.....	88.4	104.5	97.0	94.6	97.9	95.6	105.9	99.5	101.0	108.0	101.8
1904.....	97.8	115.1	91.2	95.9	100.0	98.7	110.4	93.0	100.9	108.3	99.8
1905.....	115.6	106.3	94.9	116.2	94.2	96.4	114.6	103.1	102.5	111.2	105.0
1906.....	123.8	113.5	100.2	150.0	99.1	88.1	124.4	114.9	107.7	115.6	112.5
1907.....	118.5	119.4	116.2	141.7	86.9	94.0	126.1	104.9	109.6	119.0	110.2
1908.....	100.7	117.4	94.7	108.4	86.9	100.0	111.0	95.1	103.3	123.4	105.4
1909.....	109.8	120.6	94.6	99.7	65.5	98.0	108.3	127.1	106.9	123.4	118.9
1910.....	116.9	137.3	89.7	100.7	69.0	102.8	114.6	123.9	110.9	126.6	118.9
1911.....	116.8	135.3	88.2	134.5	70.5	107.5	119.2	131.6	109.4	126.0	122.6
1912.....	116.3	125.1	87.1	151.1	79.3	107.5	120.7	147.4	122.2	130.0	133.9
1913.....	127.4	135.2	90.1	194.5	78.2	107.6	130.8	152.0	135.9	151.6	144.0

## THE COURSE OF PRICES IN CANADA 1890-1913—Continued.

YEAR.	VIII. METALS AND IMPLEMENTS.			IX. Fuel and Lighting. (Coal, coke, gasoline, coal oil, carbide, matches.)	X. BUILDING MATERIALS.			
	Metals. (Iron, steel, aluminum, antimony, Brass, copper, lead, mica, nickel, silver, spelter, solder, tin, zinc, quick silver.)	Imple- ments. (Anvils, axes, chain, crowbars, grindstones, horseshoes, mallets, screws, vices, soldering irons.)	All metals and implements.		Lumber. (pine, spruce, fir, oak, maple, birch, hemlock, laths, shingles.)	Miscel- laneous. (Bricks, lime, cement, nails, pitch, tar, pipe, paper, wire, hinges, red lead.)	Paints, Oil, and Glass. (Linseed oil, white lead, turpentine, benzine, rosin, shellac, varnish, putty, glue, etc.	All building materials.
1890.....	103.4	103.6	103.5	106.4	90.7	105.1	86.9	94.2
1891.....	94.3	103.0	97.3	105.8	90.0	98.7	82.4	90.3
1892.....	80.5	102.7	93.7	105.7	91.5	95.5	77.9	88.3
1893.....	84.2	102.4	90.6	101.8	90.8	92.7	78.3	87.2
1894.....	75.1	102.0	84.8	96.7	91.7	88.2	75.8	85.2
1895.....	71.7	100.8	82.2	96.2	90.1	85.1	76.3	83.8
1896.....	72.1	98.4	81.5	98.1	85.1	83.9	76.4	81.8
1897.....	70.7	93.0	76.9	95.6	82.3	78.4	75.8	78.8
1898.....	72.2	94.2	80.1	92.7	79.6	77.1	79.4	78.7
1899.....	92.3	97.9	94.5	95.1	84.0	86.9	85.4	85.4
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	91.0	102.0	94.9	97.3	100.5	94.8	96.8	97.3
1902.....	84.8	104.5	91.7	104.0	107.0	93.5	101.7	100.7
1903.....	87.0	105.5	93.5	110.1	112.9	96.3	100.3	103.2
1904.....	82.2	106.0	90.5	102.1	115.1	95.8	97.2	102.7
1905.....	89.4	105.9	95.3	103.2	117.6	95.5	99.5	104.2
1906.....	106.1	105.8	106.5	105.5	133.9	93.6	106.6	111.3
1907.....	111.2	106.9	110.3	107.9	144.9	97.2	110.4	117.5
1908.....	87.7	104.0	93.5	101.3	142.6	96.1	107.4	115.3
1909.....	84.0	104.3	90.5	102.9	135.6	94.5	106.9	112.3
1910.....	80.5	104.3	88.3	102.1	139.0	97.6	115.5	117.3
1911.....	89.3	104.3	95.0	99.7	145.0	91.7	122.7	119.8
1912.....	96.8	104.5	100.7	112.4	146.0	94.2	118.0	119.4
1913.....	98.2	105.4	102.1	117.2	159.0	100.8	115.0	124.9

THE COURSE OF PRICES IN CANADA, 1890-1913—Continued.

Year.		XI. Housefurnishings.					XII. Drugs and chemicals.	Miscellaneous.					I. Foods.							All (34 articles.)
		Furniture, (chairs, tables, sideboards, bedroom suites, iron beds.)	Crockery and Glassware, tumblers, white cups, dinner sets, bedroom sets.)	Table Cutlery, (knives, forks.)	Kitchen Furnishings, (pails, tubs, brooms, sad irons.)	All house furnishings.		Furs, (mink, muskrat, skunk, raccoon.)	Liquor and Tobacco, (hops, malt, whisky, ales, leaf tobacco, plug tobacco.)	Sundry, Paper, pulp, sulphite, rubber, rope, binder twine, soap, starch, kunpowder.	All commodities (272).	(Beef, veal, mutton, pork, bacon, lard.)	Dairy Products, (Milk, butter, cheese, eggs.)	Breadstuffs, (Bread, flour, oatmeal, rice.)	Beans, apples, prunes, pota- toes.	Sugar, tea, coffee, vinegar.	All foods (29).	II. Fuel and Lighting, Coal, bituminous and anthra- cite, wood, hard and soft, coal oil.		
1890.	83.6	104.5	107.5	82.6	90.9	108.8	58.7	91.8	99.1	101.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1891.	83.6	104.5	107.5	82.6	91.1	108.6	67.6	95.8	94.4	100.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1892.	84.0	103.1	107.5	85.1	91.5	102.8	70.4	96.5	87.5	95.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1893.	83.3	103.1	107.5	86.6	91.7	102.8	83.9	96.2	88.7	94.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1894.	82.5	100.2	107.5	85.1	91.9	101.5	77.0	95.5	82.9	89.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1895.	82.9	98.0	107.5	88.5	88.8	98.8	54.3	96.2	80.7	83.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1896.	84.2	96.8	105.1	79.0	98.4	98.3	54.7	94.8	81.0	85.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1897.	89.0	98.0	105.1	77.8	90.5	95.0	59.7	100.5	80.7	85.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1898.	88.7	98.4	105.1	77.3	90.5	95.0	75.4	100.5	94.1	88.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1899.	88.7	97.4	105.1	80.7	90.9	91.9	75.8	99.0	96.9	92.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1900.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1901.	98.0	100.0	100.0	94.6	97.9	98.3	95.6	100.0	98.1	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1902.	103.4	100.1	100.0	88.7	99.0	118.4	98.5	103.3	103.3	100.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1903.	103.6	100.1	100.0	90.2	99.4	114.1	103.5	102.5	102.5	102.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1904.	105.6	97.5	101.1	101.6	102.2	107.9	116.2	104.3	105.3	102.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1905.	98.5	94.6	101.1	99.9	96.4	104.8	147.5	104.6	107.1	105.1	112.8	110.9	107.7	104.7	115.0	109.2	109.8	109.8		
1906.	108.0	98.1	101.1	97.5	102.5	104.7	155.6	102.7	108.9	110.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1907.	108.6	100.8	86.9	95.8	102.2	106.8	162.5	121.4	108.8	116.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1908.	109.4	104.5	81.1	97.2	102.3	105.5	157.3	104.3	104.0	111.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1909.	109.6	95.6	75.1	100.0	100.1	103.3	154.2	113.7	107.6	112.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1910.	109.6	98.8	75.1	95.5	100.3	107.8	159.1	128.6	104.4	114.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1911.	109.6	99.2	75.2	94.3	100.1	110.4	171.6	146.3	88.7	116.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1912.	114.1	104.0	77.0	96.8	103.9	113.7	201.8	150.2	92.2	124.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		
1913.	124.8	130.8	77.1	98.0	115.4	111.6	209.0	130.3	100.0	124.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0		

(LABOUR).

In presenting the data by countries the method followed was, first, to reproduce the aggregate or group index numbers of the original investigators reduced to basis 1900. These enable comparisons in a general way to be made with the corresponding group of numbers for Canada. Such data alone, however, leave something to be desired. In the first place the figures are only roughly comparable, seeing that the number of commodities investigated and the manner in which the groups are constituted differ as between almost every country. Secondly, it is important that the facts with regard to the chief individual commodities should be available. Useful as it is to know how prices, speaking generally, have gone up in Great Britain, the United States, France, Germany, etc., as compared with Canada, it is undoubtedly desirable to be able to ascertain at a glance what has been the course of wheat, cattle, cheese, flour, iron, leather, etc., etc., in as many countries as possible. Incidentally when a fairly complete record of individual commodities has been secured, it is possible to reconstruct group index numbers as between particular countries on the same basis and thus to institute exact comparisons on a general scale in place of the rough comparisons above mentioned.

To meet this requirement two tables have been compiled showing for each of the more important commodities in turn (1) the wholesale and (2) the retail index numbers from year to year since 1900 in every country for which they could be obtained from the sources just described. These large tables are printed at the end of the chapter. Altogether they contain comparative figures for 144 commodities at wholesale and for 24 at retail. The arrangement of articles follows that of the Canadian official reports on prices. The number of countries compared is, of course, larger in the case of certain articles than of others. In the case of wheat, for instance, the price-trends in eleven countries are shown. There are several commodities, however, for which the comparisons are available only as between Canada and the United States, this being a reflection of the fact that the official statistics of these countries cover over 250 articles, whereas in most of the other countries they cover less than 50.

Using the data contained in these tables as basis there has been introduced into the review of prices for each country below an exact comparison of the price trend since 1900 there and in Canada, i.e., a comparison based on identical commodities for each, the latter including all for which comparative data were available. The comparison covers both wholesale and retail prices, and the results have been charted so as to show their significance at a glance. The wholesale index numbers are unweighted, but the retail numbers being much fewer in number have been weighted as in the comparison of Canadian wholesale and retail price trends.<sup>1</sup>

In addition, where the data was available, a comparison is made between actual prices at or near the present time in Canada and the country in question. Because the rise in prices has been greater since 1900 in Canada than in a particular country it does not necessarily follow that the resultant level here is higher. These comparisons, however, are limited in number and must be accepted with reserve in the absence of detailed information as to certain of the quotations.

Following the above detailed presentation of the data, a measure of the general tendency is given in the form of a "world" index number. With this as standard or background, broad analyses and summaries are made (1) of the rises in different countries and (2) of the rises in different groups of commodities and the reaction of the latter to local conditions, with a final statement on points of significance in the main findings.

<sup>1</sup>As comparative retail prices were obtained prior to 1909 only in the case of the years 1900 and 1905, the diagrams of retail price trends do not indicate the annual fluctuations during the periods 1900-1905 and 1905-1909, but only the general tendency.



## (1) THE UNITED KINGDOM.

There is a wealth of statistical data bearing on commodity prices in Great Britain and Ireland, during the past several years. Not only have the official investigations been most thorough, but the compilations and analyses of private statisticians are the best-known in the world.

(1) *Continuous Investigations.*

In the accompanying table will be found the index numbers by groups of the Board of Trade, Sauerbeck (now computed by the Statist), and the London Economist, each of which carries some 45 commodities at wholesale. For retail prices the index numbers of the Board of Trade covering 23 articles of food, weighted, at London are given.<sup>1</sup>

While the differences in the manner in which the commodities are grouped together, as well as in the list of the commodities themselves, prevent these statistics being directly compared with those for Canada on pages 230-233 inc.,<sup>2</sup> some rough preliminary generalizations are possible from the two sets of figures:

With regard, first, to the showing as a whole: It is plain that the general course of prices in the two countries has been the same, viz., a downward movement to 1896 and an upward movement since, leaving the general level in 1913 of both countries at the highest point within the period, 1890-1913. The fluctuations, however, in the United Kingdom have recently been less violently upward than in Canada.

(a) *Wholesale Prices.*—The rise in grains and vegetable foods, which has been less than 20 per cent in England, has been considerably greater in Canada. Meats and dairy products, in which the rise in England according to the Board of Trade has been 19.6 per cent and according to Sauerbeck 16.5 per cent, has been at least three times as great according to the Canadian figures. On the other hand, metals and textiles have fared about the same in the two countries, having gone up, if anything, more in Great Britain. Miscellaneous foods also have shown about the same tendency. The three British numbers went up about 30 per cent between 1896-1912, while the Canadian number went up about 45 per cent.

(b) *Retail Prices.*—The United Kingdom index number attained in 1912 and 1913 a point higher than at any time in 25 years. The lowest year was 1896, between which and the present a rise of 25 per cent is indicated. The rate of increase, however, has varied; the periods 1896-1900 and 1906-1913 were marked by rapid advances, but from 1900 to 1906 the increase was slight. The rise of nearly 7 per cent in 1911-1913 is a noticeable feature. The group index numbers given show about the same variations as the total. A more detailed statement of group conditions, however, is necessary:

The *meat* group showed the highest advance. Bacon and imported beef were the causes: bacon rose from 110.6 in 1908 to 123.2 in 1909, and to 144.7 in 1913; imported beef rose from 111.9 in 1909 to 131.5 in 1913. On the other hand, British mutton has remained low and steady since 1900; British beef also showed a much less marked advance than the imported.

<sup>1</sup>Two index numbers of retail prices over a period of years have been constructed by the Board of Trade, the one covering nine commodities at London between the years 1871-1903, and the other covering twenty-three commodities at London since 1892. See United Kingdom Annual Abstract of Labour Statistics. See also Special Report on Cost of Living, 1912 (cd 6955) p. 42 and on.

<sup>2</sup>Thus the British wholesale price numbers include about 45 articles, mostly raw materials, while the Canadian number includes 272, of which more than half are manufactured articles. Again, cereals and meats are grouped together in the Economist number, meats and dairy produce in the Sauerbeck number and meats and fish in the Board of Trade number, whereas these are all separated in the Canadian number.



The Course of Prices in the United Kingdom, 1890-1913. Index numbers of prices, wholesale and retail.  
 PRICES IN 1900=100.)

LABOUR DEPT., BOARD OF TRADE (WEIGHTED) WHOLESALSA PRICES.

Year.	I. Coal and Metals. (Coal, pig iron, Copper, zinc, tin, lead.)	II. Textiles. (Cotton, wool, jute, flax, silk.)	III. Food, Drink and Tobacco.				IV. Miscellaneous. Cotton seed, linseed, olive oil, palm oil, paraffin, bricks, petroleum, timber, hides, caoutchouc.	All 47 articles.
			IIIa. Corn. (Wheat, barley, oats, maize, hops, rice, potatoes.)	IIIb. Meat, Fish, Dairy Produce. Beef, mutton, bacon, pork, ham, milk, butter, cheese, eggs, herrings.	IIIc. Sugar, tea, coffee, cocoa, tobacco.	IIId. Foreign spirits, and wine.		
1890.....	74.9	105.4	115.3	99.5	125.3	113.2	99.4	103.3
1891.....	70.1	101.4	134.3	99.7	127.2	113.4	95.0	106.9
1892.....	65.2	95.6	117.9	99.9	127.8	110.3	92.5	101.1
1893.....	59.0	96.4	108.9	103.6	132.8	112.4	89.3	99.4
1894.....	60.0	88.6	100.7	99.4	117.8	109.6	84.5	93.5
1895.....	56.8	84.3	100.1	96.0	106.7	108.0	84.9	90.7
1896.....	55.5	92.9	92.7	90.1	107.8	112.3	86.5	88.2
1897.....	56.3	86.8	101.7	92.5	100.8	116.4	86.9	90.1
1898.....	61.7	80.0	117.5	99.8	99.9	113.4	89.7	93.2
1899.....	72.4	82.9	101.6	94.5	99.6	103.5	91.3	92.2
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	82.2	93.3	102.6	99.3	94.7	96.7	96.3	96.7
1902.....	76.1	92.3	102.3	104.4	84.4	91.8	92.5	96.4
1903.....	74.1	101.7	102.2	102.1	86.4	99.5	91.7	96.9
1904.....	70.9	112.9	106.9	98.3	92.5	100.8	88.3	98.2
1905.....	71.3	106.7	104.2	97.7	104.8	107.9	91.1	97.6
1906.....	78.3	121.1	102.3	102.2	88.7	103.2	95.6	100.8
1907.....	86.9	127.4	109.3	104.8	94.2	100.0	99.7	106.0
1908.....	78.5	109.8	113.8	103.3	99.0	97.8	94.8	103.0
1909.....	73.6	112.4	114.7	105.8	100.4	99.0	96.5	104.1
1910.....	76.6	136.2	105.9	111.7	111.7	100.2	104.3	108.7
1911.....	74.7	128.0	114.3	109.2	114.1	104.1	105.5	109.4
1912.....	82.9	119.6	124.0	116.8	120.4	111.9	110.1	114.9
1913.....	92.9	134.8	118.6	119.6	106.9	106.4	109.4	116.5

WHOLESALE PRICES.  
SAUERBECK (UNWEIGHTED.)

Year.	Vegetable foods. (Wheat, flour, barley, oats, maize, potatoes, rice.)	Animal foods. (Beef, bacon, pork, mutton, butter.)	Sugar, coffee, and tea.	Total foods.	Minerals. (Iron, copper, tin, lead, coal.)	Textiles. (Cotton, flax, hemp, jute, wool, silk.)	Sundry Materials. Hides, leather, tallow, oils, soda, nitrate, indigo, timber.	Totals, materials.	Grand total.
1890.....	104.8	96.5	129.6	105.8	74.0	100.0	97.2	88.7	96.0
1891.....	121.0	95.3	131.1	111.6	70.3	89.4	97.2	85.0	96.0
1892.....	104.8	98.8	127.8	105.8	65.8	86.3	94.4	81.3	90.6
1893.....	95.2	100.0	138.9	104.3	63.0	89.4	95.7	81.3	90.6
1894.....	88.7	94.1	120.4	95.6	59.3	80.3	90.0	75.0	84.0
1895.....	87.1	91.8	114.8	92.7	57.5	78.8	91.6	75.0	82.7
1896.....	85.5	85.9	92.6	89.8	58.4	81.8	88.8	75.0	81.3
1897.....	96.8	93.0	96.3	94.2	61.2	77.3	87.3	73.8	82.7
1898.....	108.7	90.6	94.4	98.5	64.9	77.3	88.8	76.3	85.4
1899.....	96.8	93.0	98.2	94.2	85.2	87.8	91.6	87.5	90.6
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	100.0	100.0	75.2	97.1	82.5	90.9	100.0	90.0	93.4
1902.....	101.6	102.4	75.9	97.1	92.5	92.5	100.0	88.5	92.0
1903.....	100.0	98.8	81.5	95.6	76.0	100.0	97.2	90.0	92.0
1904.....	101.6	97.6	92.6	98.5	75.0	107.6	94.4	90.0	93.4
1905.....	101.6	102.4	96.3	100.0	80.6	110.0	95.6	93.7	96.0
1906.....	100.0	104.7	85.1	100.0	93.6	421.3	104.2	103.8	102.7
1907.....	111.3	103.4	88.8	104.3	99.0	116.7	108.5	107.5	106.7
1908.....	112.9	104.7	88.8	104.3	82.5	94.0	102.8	97.4	97.4
1909.....	114.5	104.7	92.6	105.8	79.7	97.0	107.1	93.8	98.7
1910.....	104.8	113.0	100.0	107.2	82.4	110.6	114.1	101.2	104.0
1911.....	105.9	112.9	112.9	108.7	86.2	115.2	114.1	103.8	106.6
1912.....	125.8	113.0	114.9	117.4	101.9	115.2	114.4	110.0	113.3
1913.....	111.3	116.5	100.0	111.6	102.8	127.2	116.9	113.7	113.3

## RETAIL PRICES.

LABOUR DEPT. BOARD OF TRADE (WEIGHTED).

"ECONOMIST" INDEX NO. JAN. 1ST EACH YEAR \*(UNWEIGHTED).

Year.	Cereals and Meats. (For. and Eng.), flour, barley, oats, potatoes, rice, beef, mutton and pork.	Other foodstuffs. etc. Tea, coffee, sugar B., sugar C., butter, tobacco.	Textiles. Cotton A., cotton E., yarn, cloth, wool, Eng., wool, Aus., silk, flax, hemp, jute.	Minerals. Pig iron, iron bars, steel rails, coal steam, H. coal, lead, tin, copper.	Miscellaneous. Baltic timber, American leather, petroleum, oil, oil seed, tallow, indigo, crystals, rubber.	Total.	I. Bread, flour, rice, tapioca, oatmeal, potatoes.	II. Beef (2), mutton (2), pork, bacon.	III. Butter, eggs, cheese.	IV. Tea, coffee, cocoa.	V. Sugar, jams (2), currants and raisins.	Total. Weighted index numbers for 23 articles.
1890.....	85.3	116.6	73.9	62.3	89.1	92.7	111.0	99.4	98.5	98.0	117.8	101.2
1891.....	100.0	108.1	68.5	64.0	85.7	88.2	97.2	98.9	99.0	97.1	109.2	103.8
1892.....	104.6	98.1	63.6	64.0	83.6	87.3	92.3	96.5	94.7	93.8	109.2	99.3
1893.....	99.2	96.8	68.3	70.5	92.7	86.4	89.4	93.8	92.4	93.8	98.7	94.9
1894.....	100.0	100.0	89.8	92.8	96.9	79.1	89.9	90.2	93.8	93.8	91.7	92.1
1895.....	102.8	98.1	89.8	92.8	96.9	81.8	89.9	90.2	93.8	93.8	94.1	91.7
1896.....	99.0	79.6	83.2	92.8	95.2	80.9	101.3	93.4	94.8	93.8	88.4	95.5
1897.....	100.4	95.1	85.3	73.7	97.9	80.9	114.3	94.6	94.8	93.7	90.1	99.5
1898.....	99.8	97.4	95.4	71.8	99.6	84.5	94.3	96.1	97.2	94.4	92.6	95.4
1899.....	103.8	110.1	93.5	74.7	95.8	96.4	100.0	100.0	100.0	100.0	100.0	100.0
1900.....	105.0	100.0	101.2	88.6	100.8	96.4	96.0	103.6	99.1	102.8	104.3	100.4
1901.....	103.4	97.7	110.5	102.9	105.9	89.1	97.9	106.4	98.6	102.8	97.9	101.0
1902.....	104.9	107.2	95.8	85.9	104.7	90.5	105.4	104.2	101.4	102.8	102.8	102.8
1903.....	106.8	97.4	85.3	80.0	103.9	92.7	107.3	100.4	96.8	103.2	106.1	102.4
1904.....	106.4	108.8	105.3	82.7	112.2	94.5	102.4	101.1	98.5	108.8	117.5	102.8
1905.....	108.1	108.1	106.8	80.0	115.6	99.1	99.7	102.9	101.2	101.0	108.7	102.0
1906.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1907.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1908.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1909.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1910.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1911.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1912.....	119.3	132.2	110.5	87.6	110.9	104.5	105.4	104.2	101.4	103.8	116.7	105.0
1913.....	111.9	115.3	112.4	93.5	109.1	108.4	116.2	120.9	109.3	104.7	115.7	114.8

\*The group numbers on the basis (1900 1905) established by *The Economist* in 1911 go back only to 1896. (See *The Economist* for Nov. 18, 1911, p. 1034).

The group showing the next highest rise is *flour, cereals and potatoes*. It reached its lowest point in 1895, and its highest in 1913. Tapioca reached 148.5 in 1912 and 142.9 in 1913; oatmeal 129.9 in 1913; and rice 119.6. Bread, flour and potatoes are the most important commodities in this group; of these bread stood at its highest in recent years, reaching 119.5 in 1912 and 120.3 in 1913; flour followed closely throughout, being 118.5 in 1912 and 1913; potatoes, however, brought the group index down several points, being only 95.9 in 1912 and 96.6 in 1913.

The group of *sugar, jam, currants and raisins*, reached its lowest point in 1897 (88.4), and its highest in 1912 (129.2), declining in 1913 (115.7). Sugar, the most important commodity, steadily increased in price to 137.7 in 1912, but declined to 116.7 in 1913.

The *dairy produce* index was only 111.1 in 1912 and 109.3 in 1913, having been at its lowest in 1895 at 92.4. Cheese, eggs and butter followed nearly the same rate of advance. Milk remained stationary.

The *tea, coffee and cocoa* group showed the least advance. Tea was high in 1904 owing to the imposition of a higher duty.

Summing up, the important commodities having the greatest increases in price of late years in the United Kingdom are bacon, imported beef, bread, flour, and sugar, while the only important commodity showing the reverse tendency is potatoes.

## (2) *Special Investigations.*

The results of certain special investigations may be cited as supplementary to the above.

(a) *Board of Trade*.—In 1912 a special inquiry was made by the Board of Trade into rents, retail prices of food and wages in 88 important industrial towns in the United Kingdom, repeating on an identical basis an investigation conducted in 1905. The general effect was to show that retail prices increased 13.7 per cent<sup>1</sup> during the seven-year period. The following tables<sup>2</sup> show the geographical distribution of the upward tendency and the tendency according to population groups throughout the British Isles:

<sup>1</sup> 13 per cent of the 88 cities are weighted according to population.

<sup>2</sup> C.d. 6955 XXXIX.

PERCENTAGE CHANGE IN RETAIL PRICES BETWEEN OCTOBER, 1905,  
AND OCTOBER, 1912.

Per- centage increase.	TOWN IN WHICH THE PERCENTAGE WAS AS STATED.			Per- centage increase.
	England and Wales.	Scotland.	Ireland.	
20	Stockport.....			20
19			Waterford.....	19
18	Blackburn, Bolton, Gloucester, Liver- pool, Bootle, Swansea, Wigan.....		Londonderry.....	18
17	Kidderminster, Newport (Mon.), Roch- dale.....			17
16	Birkenhead, Burnley, Burton-on-Trent, Grimsby, Preston, St. Helens, York.....	Aberdeen, Perth....	Cork.....	16
15	Bradford, Halifax, Keighley, Leicester, Manchester and Salford, Middles- brough, Normanton, Peterborough, South Shields, Sunderland, Walsall, Worcester.....		Limerick.....	15
14	Birmingham, Carlisle, Coventry, Derby, Huddersfield, Leeds, Macclesfield, Northampton, Norwich, Oldham, Sheffield, Stoke-on-Trent, Taunton, Warrington, Wolverhampton.....	Greenock.....		14
13	Barrow-in-Furness, Chatham and Gil- lingham, Chester, Leigh.....	Edinburgh..... Galashiels.....	Belfast.....	13
12	Crewe, Darlington, Merthyr, Tydfil.....			
11	Cardiff, Gateshead, Hull, Jarrow, Lon- don (Middle and Inner Zones), New- castle-on-Tyne, Plymouth, Devonport	Dundee, Falkirk, , Glasgow, Paisley..		12
10	Bedford, Bristol, Luton, Stockton-on- Tees.....	Kilmarnock.....		11
9	Castleford, Ipswich, Lincoln, London (Outer Zone), Nottingham, Reading, Sheerness.....		Dublin.....	10
8	Croydon, Dover, Southampton, Swindon			8
7	Portsmouth.....			7

PERCENTAGE CHANGES IN RETAIL PRICES—POPULATION GROUPS.

Population Group.	Number of towns Included.	MEAN PERCENTAGE INCREASE IN RETAIL PRICES BETWEEN OCTOBER, 1905, AND OCTOBER, 1912.				
		Meat (British).	Other Food.	Total Food.	Coal.	Food and Coal.
London.....	1	11	11	11	16	12
(Middle Zone.....		9	12	11	17	12
Inner Zone.....		8	10	10	14	10
Other towns with population exceeding 250,000.....	14	8.1	13.4	12.1	22.6	13.0
Population from 100,000 to 250,000.....	26	9.8	14.8	13.4	20.9	14.2
Population from 50,000 to 100,000.....	23	8.6	14.3	12.7	23.7	13.8
Population from 14,000 to 50,000.....	24	9.0	14.1	12.7	23.3	13.6

From the above it will be seen that in every one of the towns there has been an increase, the minimum advance being 7 per cent and the maximum 20 per cent. The



highest rate of advance was in Lancashire and Cheshire and the lowest in the southern counties of England. The rise in London has been on the whole somewhat less than the mean rise in the other towns investigated.<sup>1</sup>

## INDEX NUMBER OF THE PRICE OF BREAD.

Year.	London.	Edinburgh.	Dublin.
1882.....	142.3	138.6	138.1
1892.....	119.2	103.5	119.0
1900.....	100.0	100.0	100.0
1905.....	105.8	105.3	114.3
1909.....	117.3	118.4	119.0
1912.....	111.5	118.4	123.8

This shows that the price of bread has not advanced as rapidly in London as in Edinburgh and Dublin. Other tables given by the Board of Trade, however, bear out the fact that the rise in prices in London is fairly representative of the whole United Kingdom.

## MEAN PERCENTAGE INCREASE (+) OR DECREASE (-) IN PREDOMINANT RETAIL PRICES PAID BY THE WORKING CLASSES, BETWEEN OCTOBER, 1905, AND OCTOBER, 1912.

Geographical Groups.	BRITISH MEAT.			Tea.	Sugar.	Bacon.	Eggs.
	Beef.	Mutton.	Pork.				
London..... (Middle Zone.....)	+11.7	+ 7.7	+10.3	Nil.	Nil.	+18.3	+28.8
London..... (Inner Zone.....)	+ 9.5	+ 7.3	+12.1	- 2.0	+ 2.0	+21.3	+27.8
London..... (Outer Zone.....)	+ 9.5	+ 3.1	+13.5	Nil.	+ 1.5	+17.9	+18.6
Northern Counties and Cleveland..	+12.1	+ 9.6	+14.6	- 5.6	- 3.3	+40.2 (+37.7)	+ 6.9
Yorkshire (except Cleveland).....	+10.1	+ 7.5	+14.0	-18.0	Nil.	+38.4 (+29.1)	+ 6.6
Lancashire and Cheshire.....	+10.0	+ 5.8	+13.2	- 3.3	- 0.3	+33.4 (+25.2)	+21.4
Midlands.....	+ 8.3	+ 4.9	+13.1	- 1.1	- 0.8	+37.8 (+30.7)	+12.1
Eastern and East Midland Counties	+ 6.9	+ 4.4	+10.4	-12.4	- 1.4	+27.0 (+23.3)	+ 7.0
Southern Counties.....	+ 6.3	+ 2.5	+12.7	- 3.5	- 1.1	+25.5 (+24.2)	+ 8.6
Wales and Monmouth.....	+11.5	+10.5	+15.8	- 4.2	Nil.	+33.5 (+28.8)	+31.8
Scotland.....	+14.7	+ 9.0	+11.7	- 5.3	+0.7	+21.7 (+15.7)	+11.9
Ireland.....	+ 3.3	+ 2.3	+ 5.6	- 1.7	+7.7	+27.8 (+23.0)	+21.0

	Cheese.	Butter.*	Pota- toes.	Flour.	Bread.	Milk.	Coal.
London..... (Middle Zone.....)	+19.0	+10.0	+14.0	+14.4	+15.3	Nil.	+16.2
London..... (Inner Zone.....)	+17.4	+10.9	+13.5	+12.0	+19.5	Nil.	+17.4
London..... (Outer Zone.....)	+19.7	+ 9.6	+17.1	+14.6	+14.0	Nil.	+13.7
Northern Counties and Cleveland..	+19.2	+10.9 (+10.2)	+42.8	+14.3	+ 9.7	+ 4.0	+27.4
Yorkshire (except Cleveland).....	+17.9	+11.1 (+ 9.6)	+41.1	+19.1	+16.3	+14.7	+18.9
Lancashire and Cheshire.....	+19.2	+ 9.5 (+ 9.2)	+62.6	+16.4	+22.3	+10.6	+25.5
Midlands.....	+20.5	+10.2 (+10.4)	+50.9	+15.1	+15.8	+16.6	+22.0
Eastern and East Midland Coun- ties.....	+17.1	+ 9.9 (+ 9.6)	+50.3	+16.0	+10.7	+ 7.7	+27.7
Southern Counties.....	+20.6	+10.9	+27.3	+12.5	+10.2	+ 3.8	+13.7
Wales and Monmouth.....	+20.8	+ 8.3 (+ 7.5)	+30.5	+18.3	+18.0	+16.5	+15.0
Scotland.....	+17.5	+ 7.7 (+6.7)	+37.1	+11.2	+13.0	+ 2.9	+24.1
Ireland.....	+14.3	+10.0	+59.2	+13.5	+19.0	+ 8.0	+25.8

<sup>1</sup>From a table given in the "Abstract of Labour Statistics" for 1912 (p. 142), the following figures showing the increase in the cost of bread in London, Edinburgh and Dublin, are taken (prices in 1900=100).

\*The figures in brackets are those obtained if account be taken only of those descriptions of bacon and butter for which predominant prices are available for both 1905 and 1912. In certain cases, however, a higher class article has come into use since 1905.

The mean percentage changes in the several articles in the 88 towns taken as whole, follows:—

Commodity.	Percentage Increase (+) or Decrease (-).
Beef, British.....	+ 9.5
Mutton, British.....	+ 6.1
Pork, British.....	+12.6
Tea.....	- 3.8
Sugar.....	- 0.2
Bacon.....	+32.1
Eggs.....	+13.6
Cheese.....	+18.8
Butter.....	+ 9.9
Potatoes.....	+46.1
Flour.....	+15.1
Bread.....	+15.3
Milk.....	+ 9.4
Coal.....	+22.5
All above commodities.....	+13.7

(b) *Other Investigations.*—The results of certain other recent investigations are shown in the following table:—

Year	(1) G. H. Wood.	(2) A. L. Rowley	(3) Co-operative Wholesale Society	(4) Mr. G. H. Wood		
				1	2	3
1900.....	89	97	.....	93	94	97.5
1901.....	90	98	.....	93	95	97
1902.....	91	98	.....	97.5	93	98
1903.....	92	99	.....	94	95	98
1904.....	93	99	.....	94	99	99.5
1905.....	92	99	.....	96	97	100
1906.....	92	99	105.4	96	96	100
1907.....	95	100	.....	96.5	94	100
1908.....	97	102	109.9	98	98	102
1909.....	97	102	.....	99	100	103
1910.....	98	103	113.3	98	101	103
1911.....	.....	.....	111.2	100	100	104
1912.....	.....	.....	116.3	101	103	105
1913.....	.....	.....	113.4	.....	.....	.....

(1) Prices in 1850 = 100. *Article on Real Wages and the Standard of Comfort since 1850.*—*Journal of the Royal Statistical Society*, 1909. Data obtained largely from Board of Trade Publications.

(2) *Daily News*, Oct. 9, 1911. List of articles not given, quoted in article cited in preceding paragraph.

(3) Prices in 1898 = 100. Number of articles, 8. Index number made from prices at wholesale, based on an average weekly family grocery order, compiled by the Co-operative Wholesale Society, Limited, Manchester, England. The commodities included are 1 lb. bacon, 2 lbs. butter,  $\frac{1}{2}$  lb. cheese, 2 lbs. flour,  $\frac{1}{2}$  lb. lard, 1 lb. meal, 4 lbs. sugar and  $\frac{1}{2}$  lb. tea.

(4) *The course of real wages in London, 1900-1912*—*Journal of Royal Statistical Society*, December, 1913. Number of articles, 14. Prices 1911 = 100. Column No. 1 based on data obtained from working class firms; Column No. 2 on data from middle class firms; Column No. 3 on data from all firms. The commodities included are beef, mutton, pork, bacon, butter, cheese, sugar, rice, tea, bread, flour and milk.

Only very general comparisons are possible from these index numbers, owing to differences in commodities, weighting and base, but it will be seen that the general effect is to show a less rapid rate of advance than that of the Board of Trade; especially is this the case of Mr. Bowley's and Mr. Wood's numbers.

## DIRECT COMPARISONS OF RECENT PRICE TENDENCIES IN THE UNITED KINGDOM AND CANADA.

In the foregoing the attempt has been to indicate in a general way by existing statistical combinations what the advances in the two countries have been. To make satisfactory comparisons, however, it is necessary to bring the same articles in each case into juxtaposition.

(a) *Wholesale Prices.*—The statistics of the two countries above referred to include fifty-two articles common to both. The index numbers for these are included in table "A" of the appendix (those for the United Kingdom, however, are complete only to 1912). A simple average of the numbers is as follows:—

## TREND OF WHOLESALE PRICES IN CANADA AND THE UNITED KINGDOM.

	1900-1913 Number of Articles, 52*				Prices 1900 = 100.		
	1900	1901	1902	1903	1904	1905	1906
Canada.....	100.0	98.5	99.5	100.8	100.6	106.1	109.7
United Kingdom.....	100.0	99.1	95.1	95.0	95.7	98.1	103.6
	1907	1908	1909	1910	1911	1912	1913
Canada.....	115.7	111.2	114.6	120.0	122.8	130.4	126.6
United Kingdom.....	108.8	102.0	102.7	108.1	110.3	115.2	115.7

\*The statistics for all fifty-two articles are in the case of Canada from official sources. In the case of the United Kingdom, preference was given to official sources and the statistics for 42 articles are from the Board of Trade reports as follows: barley (two grades), oats (two grades), wheat (two grades), corn, flaxseed, bacon, pork, ham, beef, mutton, butter, cheese, eggs, milk, fish, potatoes, rice, chocolate, coffee, tea, sugar, wool, silk, flax, jute, cotton, hides, copper, iron (pig), lead, tin, zinc, coal oil, coal, timber, bricks, whiskey, tobacco, rubber. Of the remainder, the following eight are from Sauerbeck, namely, flour, iron bar, rope, leather, tallow, linseed oil, carbonate of soda, indigo, while two, yarn and cloth, are from the *Economist*.

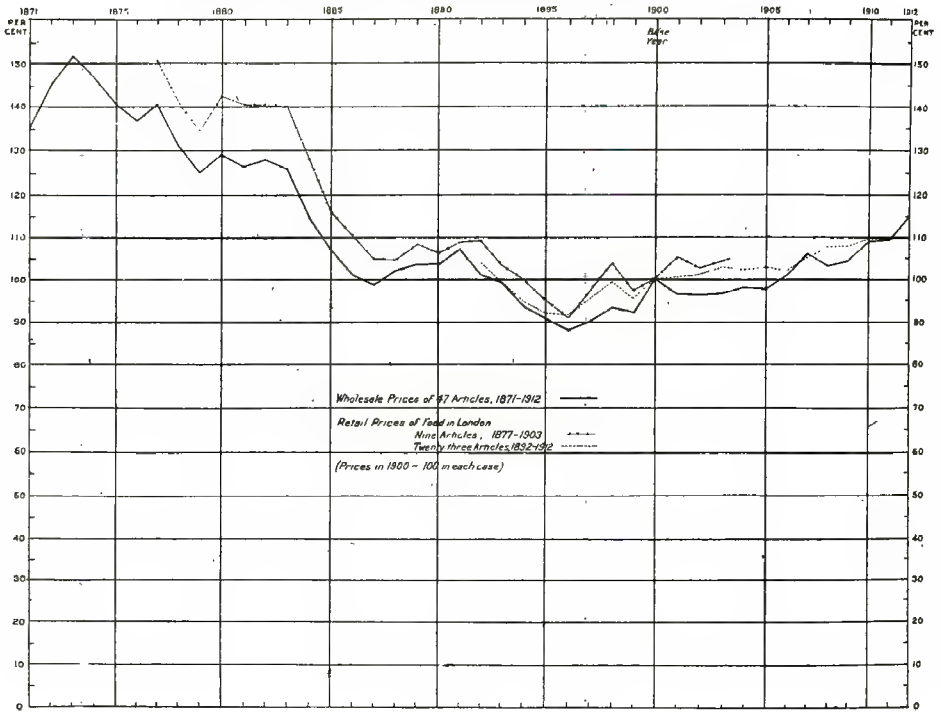
It will be seen that the rise in wholesale prices according to this showing has been 30 per cent in Canada compared with 15 per cent in the United Kingdom. In both countries there was a recession in 1901, but whereas the recovery was almost immediate in Canada it was not until 1905 that it was effected in Great Britain. Thereafter, until 1907, the lines went up together. The recovery of buoyancy in 1909 after the setback of 1908 was more marked in Canada. In 1910 and 1911 the rise was pronounced in both countries, but the Canadian advance of 1912 outdistanced the contemporary rise in the United Kingdom. This last spurt and the steadiness of 1902-04 in Canada accounted for most of the gain which the final Canadian index number shows.

Glancing at the record from the standpoint of the commodities included: in 1912, 33 of the 52 commodities showed a greater increase in Canada than in the United Kingdom. Generally speaking, animal products, dairy products, potatoes, flour and grains have advanced more rapidly in Canada. Canadian coal advanced in 1912 to 161.5, against a British index number of 76.1; Canadian timber to 146.0 against 98.7 and Canadian bricks to 175.6 against 79.2. Textiles held about the same rises from 1900 on, but in 1912 raw cotton, raw silk, raw flax, jute, wool and cloth had gone up less in Canada. Metals averaged about the same: in 1912 copper and lead had the

same index numbers in both countries; English pig iron and iron bar were less buoyant than the Canadian, being 87.6 against 106.3, but Canadian tin was only 140.3 against the British 157.9 and Canadian zinc 105.1 against the British 125.6.

(b) *Retail Prices.*—The official statistics of retail prices of the two countries enable direct comparison to be made between 16 articles of food for the years 1900-1913. The total index numbers for these, weighted, are given below. The numbers for the individual commodities may be found in the appendix.

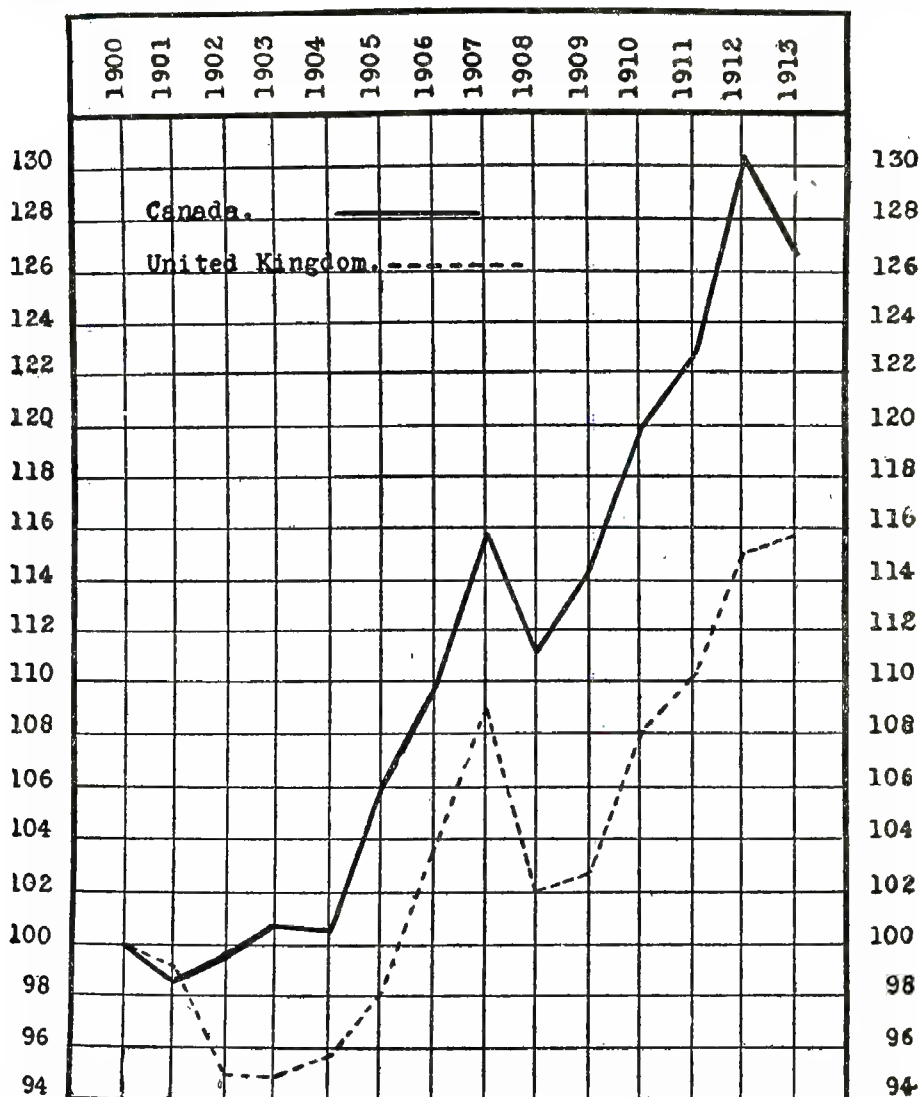
CHART TO ILLUSTRATE FLUCTUATIONS IN WHOLESALE & RETAIL PRICES.



## WHOLESALE PRICES IN CANADA AND THE UNITED KINGDOM, 1900-1913.

Number of Articles, 52.

Prices 1900=100.





## TREND OF RETAIL PRICES IN CANADA AND THE UNITED KINGDOM, 1900-1913.

	Number of Articles, 16.*				Prices 1900 = 100	
	1900	1905	1910	1911	1912	1913
Food only—						
Canada.....	100.0	110.4	129.7	139.9	144.4	145.0
United Kingdom.....	100.0	101.3	107.5	108.5	113.8	113.8
Food and coal—						
Canada.....	100.0	110.1	127.9	135.1	140.9	139.6
United Kingdom.....	100.0	96.7	102.7	103.8	108.4	109.2

\*Namely, beef, mutton, pork, bacon, eggs, milk, butter, cheese, bread, flour, oatmeal, rice, sugar, coffee, potatoes, tea.

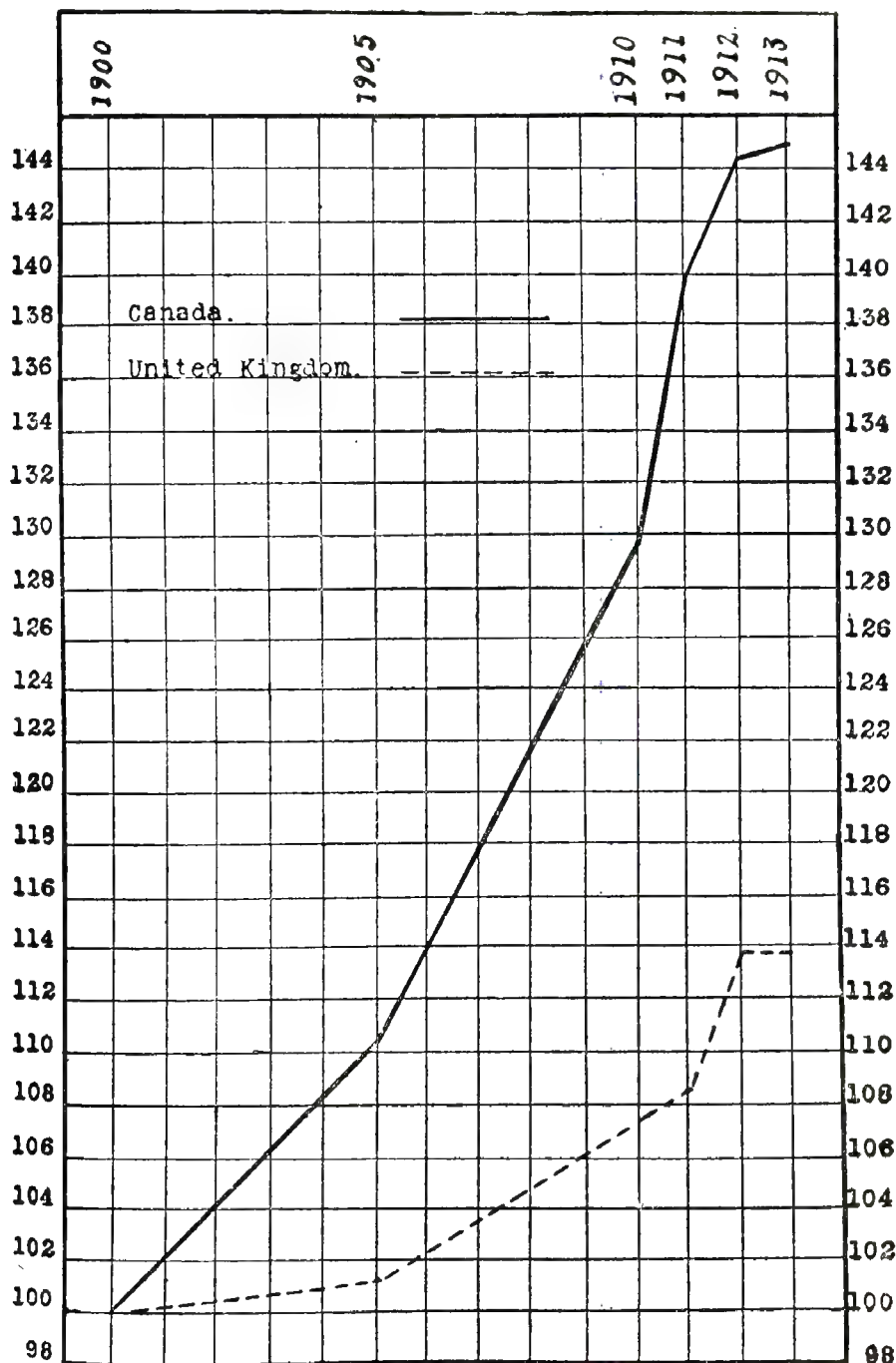
In retail prices much the same story is told as in the case of wholesale. The rise has been considerably greater in Canada, say 40-45 per cent compared with 14 per cent. In retail prices, as in wholesale, the Canadian rise of the opening years of the century was not reproduced in Great Britain. In 1910 and 1911 also the Canadian rise was more pronounced. In 1912, however, the rise in England was quite as remarkable as the corresponding rise in Canada.

As between 1900 and 1913, eleven of the sixteen commodities rose more rapidly in Canada than in London; of these meat products, dairy products, potatoes and flour, show much larger increases; the index number for eggs is respectively 188.7 in Canada and 112.5 in London; pork 167.2 against 109.9; beef, 166.6 against 120.5; potatoes 153.0 against 96.6; and flour 132.0 against 118.5. On the other hand, five London index numbers were higher in 1913, namely bread, oatmeal, rice, sugar and coffee. The total weighted index number, formed from this comparison, gives a larger increase in Canada than in London, being respectively 129.7 in Canada in 1910 and 107.5 in the United Kingdom, 139.9 in Canada in 1911 against 108.5 in the United Kingdom, 144.4 in Canada in 1912 against 113.8 in the United Kingdom, and 145.0 in Canada in 1913 against 113.8 in the United Kingdom.

## RETAIL PRICES OF FOODS IN CANADA AND THE UNITED KINGDOM, 1900-1913.

Number of Articles 16.

Prices 1900=100.



## COMPARISON OF PRESENT PRICES IN THE UNITED KINGDOM AND CANADA.

It remains to note whether actual present prices are higher in the United Kingdom or in Canada. Because prices have advanced more rapidly in Canada than in England it does not necessarily follow, except inferentially, that they are now actually higher. In order to throw light on this point four tables are given herewith.<sup>1</sup>

The first contains the average prices of thirteen commodities in eighty-eight towns including London in England,<sup>2</sup> and of the same commodities in fifty-five towns in Canada.<sup>3</sup> It will be noted that the British prices are for October and the Canadian prices for the whole year. But as October was selected by the Board of Trade as being on the whole the most representative month, this difference, will probably not invalidate the comparison. In addition, a weekly budget has been worked out in the terms of the British and Canadian prices respectively. It will be seen that the Canadian prices of bread, sugar, cheese and potatoes are considerably above the British; mutton, tea, bacon, eggs, flour, butter and milk are slightly higher in Canada; and beef and pork are lower. The budget works out about 10 per cent higher than in England.

The second table gives a comparison of the same articles in London and Montreal, respectively in October, 1912. The London prices of sugar, eggs, cheese, potatoes and bread are considerably below the Montreal prices. Other prices are about the same, Montreal beef steak and pork are markedly lower. The excess of Montreal prices over London amounts to about 17 per cent.

<sup>1</sup> The comparison is limited to retail prices. An analysis of wholesale prices based on the official statistics of the two countries appears in the subjoined table printed in the "Monetary Times" Annual, 1914. The purpose of the table is to show the "spread" between English and Canadian prices in 1900 and 1912, the review being limited to foodstuffs. The table shows that in 1900, Canadian wholesale prices of the articles in question were 74.3 per cent of current English prices, whereas to-day they are 93.8 per cent. British prices are shown by the table to have risen 20 per cent between 1900 and 1912, whereas Canadian prices have risen during the same interval from a point about 25 per cent below British prices of 1900 to a point about 15 per cent higher than that level. The table shows that for several important articles Canadian prices are the lower. The entire group works out at about 6 per cent lower, and the list of grains is lower to a marked degree. Beef, mutton, milk and cheese also are lower, though butter, eggs, bacon, sugar and potatoes are higher. The table, however, is based on wholesale prices and is somewhat overloaded with raw materials, both of which considerations impair its value as directly reflecting cost of living. The consumer purchases flour, not wheat, oatmeal, not oats, etc., and he buys them at retail, not wholesale prices.

<sup>2</sup> Cost of Living of the Working Classes, 1912 (Board of Trade, Cd. 6955). See also "Appendices to Evidence from the Select Committee on Post Office Servants" (268), 1913.

<sup>3</sup> From Appendix 2, p. 86, preceding.

CONTINUATION OF FOOTNOTE (1) ON PAGE 248.

Commodity	Unit	AVERAGE.				PRICE RATIOS.			
		Yearly Prices (wholesale)				Percentage of Canadian prices in 1900 of British prices in 1900	Percentage of Canadian prices in 1912 of British prices in 1900	Percentage of British prices in 1912 of Canadian prices in 1900	Percentage of Canadian prices in 1912 of British prices in 1900
		Canada		Great Britain					
		1900	1912	1900	1912				
Wheat.....	Bu.	65.91	97.67	81.87	105.7	80.5	119.3		
Wheat.....	"	74.56	97.44	88.7	110.5	84.1	109.8		
Barley.....	"	40.72	79.97	75.8	93.3	53.7	105.1		
Barley.....	"	35.91	57.70	65.6	84.9	54.7	88.1		
Oats.....	"	26.66	46.31	53.5	65.4	49.8	86.6		
Oats.....	"	34.33	40.74	44.1	57.8	77.8	92.3		
Oats.....	"	46.04	76.13	61.9	84.4	74.4	122.8		
Maize (corn).....	"	41.25	132.40	88.5	98.5	46.6	149.6		
Potatoes.....	90 lb.	7.87	12.903	14.7	16.7	53.5	113.8		
Beef.....	"	7.87	12.90	18.2	19.0	43.2	87.7		
Mutton.....	"	12.13	16.79	10.2	15.3	118.9	70.8		
Bacon.....	gal.	15.5	18.83	17.0	19.3	91.5	164.6		
Milk.....	gal.	20.62	29.31	22.5	25.3	91.6	110.7		
Butter.....	lb.	11.21	13.92	12.3	15.6	89.1	130.3		
Cheese.....	doz	14.0	25.68	15.6	21.4	89.7	113.1		
Eggs.....	doz	469.4	551.7	311.7	401.5	150.5	164.6		
Sugar.....	cwt.						170.5		
				74.3	93.8	120.3	114.8		

The third and fourth tables give similar comparisons as between Manchester and Toronto, and Hamilton and Walsall, these being towns occupying about the same relative position in the two countries. It will be seen that the Toronto prices are about 11.5 per cent higher than Manchester and the Hamilton prices about 14.4 per cent higher than Walsall.

The tables, of course, are not to be regarded as more than rough indications of the respective price levels. For final comparisons, investigations on the same basis and by the same persons is imperative.

BUDGET AT RETAIL PRICES, UNITED KINGDOM (OCTOBER, 1912) AND CANADA,  
(AVERAGE YEAR, 1912).

Commodity.	Quantity Consumed Per week	Price (per unit).			Cost per week.	
		United Kingdom		Canada	United Kingdom	Canada
		s. d.	cents.	cents	cents	cents
Beef, lb.....	4 lbs.	8-10	18.3	17.4	73.2	69.6
Mutton, lb.....	2 lbs.	8-9½	17.7	17.8	35.4	35.6
Pork, lb.....	2 lbs.	8½-9½	18.2	17.5	36.4	35.0
Tea, lb.....	½ lb.	16-18	34.5	35.6	17.2	17.8
Sugar, granulated, lb.....	6 lbs.	2-2½	4.3	6.5	25.8	39.0
Bacon, lb.....	1 lb.	10-11	21.3	22.5	21.3	22.5
Eggs, doz.....	2 doz.	14-18*	32.9	34.3	65.8	68.6
Cheese, lb.....	2 lbs.	8-9	17.2	20.1	34.4	40.2
Butter, lb.....	3 lbs.	15-16	31.4	31.7	94.2	95.1
Potatoes, per 90 lbs.....	2 pks.	45-58	104.4	145.0	34.8	48.3
Flour, lb.....	10 lbs.	1½-1¾	3.05	3.4	30.5	34.0
Bread, lb.....	15 lbs.	1½-1¾	2.9	4.0	43.4	60.0
Milk, per qt.....	6 qts.	3½-4	7.6	8.3	45.6	49.8
					\$5 58	\$6 15

\*Irish eggs.



## RETAIL PRICES: LONDON AND MONTREAL, OCTOBER, 1912.

	Quantity Consumed per week <sup>1</sup>	PRICE		Montreal Cents per lb.	Cost	
		s. d. per lb.	London Cents per lb.		London per week	Montreal per week
Steak (Br).....	2 lb.	1s 2d	28-38	22	56-76	
Steak (Imp.).....	2 lb.	1s	24-30		48-60	88
Mutton, leg (Br.).....	1 lb.	8d-10d	18-25	18	18-25	
Mutton, leg (Imp.).....	1 lb.	5½d-7d	12-67		12-67	36
Pork, fresh.....	2 lb.	8d-10d	18-25	15	36-50	30
Tea.....	½ lb.	1s 4d-1s 6d	34-47	35	17-23	17
Sugar, granulated.....	6 lb.	2d	4-05	5½	24-30	33
Bacon.....	1 lb.	9d-11d	20-3	22	20-03	22
Eggs.....	2 doz.	(a) 1s	24-33 (a)	36-45 (a)	48-66	80
Cheese.....	2 lb.	8d-9d	17-24	20-22	34-43	42
Butter.....	3 lb.	1s 1d-1s 2d	27-37	29-30	32-11	90
Potatoes.....	2 pk.	(b) 3s 4d	80	1-00 (b)	26-66	33
Flour (d).....	10 lb.	(d) 1s 3d	3-07	3-7	37-	37
Bread.....	15 lb.	1-25d	2-28	.04	34-2	60
Milk.....	2 qt.	4d. (c)	8-11 (c)	09 (c)	48-6	54
					5-46	6-42

(a) Eggs per dozen (Foreign eggs at London).

(b) Potatoes per 90 lb.

(c) Milk per quart.

(d) Per 7 lb.

## BUDGET AT RETAIL PRICES, MANCHESTER AND TORONTO.

OCTOBER, 1912.

Commodity.	Quantity Consumed per Week.	Price (per unit).			Cost per Week.	
		Manchester.		Toronto.	Manchester	Toronto
		s.	d.	cents.	cents.	cents.
Steak, lb.....	2 lb.	11—13*		24·3	48·6	
Steak, lb.....	2 lb.	8—9†		17·2	34·4	90 0
Mutton, leg, lb.....	1 lb.	9—10½*		19·8	19·8	
Mutton, leg, lb.....	1 lb.	6—6½†		12·7	12·7	33·0
Pork, fresh, lb.....	2 lb.	9½—10		19·8	38·6	34·00
Tea, lb.....	½ lb.	16		32·4	16·2	15·
Sugar, granulated, lb.....	6 lb.	2—2½		4·31	5·55	25·86
Bacon, lb.....	1 lb.	10—12		22·30	22·3	20·0
Eggs, dozen.....	2 doz.	18††		36·48	37·5	73·0
Cheese, lb.....	2 lb.	16		17·2	22·0	34·4
Butter, lb.....	3 lb.	12—14		26·4	32·5	79·2
Potatoes, per 90 lb.....	2 pks.	45—63		109·5	125·0	36·5
Flour, lb.....	10 lb.	1½		3·0	3·	30·0
Bread, lb.....	15 lb.	1½		2·5	3·	37·5
Milk, per quart.....	6 qts.	3½—4		7·6	10·	45·6
					\$5·54	\$6·18

\*British.

†Imported.

†Irish eggs.

## BUDGET AT RETAIL PRICES, WALSALL AND HAMILTON.

OCTOBER, 1912.

Commodity.	Quantity Consumed per Week.	Price (per unit).			Cost per Week.	
		Walsall.		Hamilton	Walsall	Hamilton
		s.	d.	cents.	cents.	cents.
Beef, lb.....	2 lb.	1	*	24·33	48·66	
Beef, lb.....	2 lb.	7—8 †		15·21	30·42	92·0
Mutton, lb.....	1 lb.	9—10*		19·26	19·26	
Mutton, lb.....	1 lb.	5—6 †		11·15	11·15	38·0
Pork, fresh, lb.....	2 lb.	8—8½		16·73	17·18	33·46
Tea, lb.....	½ lb.	16—18		34·47	25·40	17·23
Sugar, lb.....	6 lb.	1½—2		3·80	6½—7	22·80
Bacon, lb.....	1 lb.	9½—11		20·78	22·0	20·78
Eggs, dozen.....	2 doz.	1· 0 †		24·33	32—38	48·66
Cheese, Canadian, lb.....	2 lb.	8		16·22	18—22	32·44
Butter, lb.....	3 lb.	14—15		29·40	30—32	88·20
Potatoes, per 90 lb.....	2 pks.	4· 6		109·5	90·	36·50
Flour, lb.....	10 lb.	1·43		2·90	3·	29·00
Bread, lb.....	15 lb.	1·37		2·78	3½	41·70
Milk, quart.....	6 qts.	4		8·11	8·	48·60
					\$5·29	6·05

\*British.

†Imported.

†Foreign.

## (II). THE UNITED STATES.

(1) *Wholesale Prices*.—The course of wholesale prices in the United States is shown in the accompanying table by means of three index numbers: (1) that of the Bureau of Labour Statistics, which includes 255 commodities, of which 54 are raw materials and the remainder manufactured articles; (2) the Gibson index number, a continuation of Duns from 1907, including 22 foods; and (3) Bradstreet's index number, representing 106 raw and manufactured articles. All three show a general fall from 1890 to 1897, and a pronounced rise from that year to the present.<sup>1</sup> The Labour Bureau's index number and Bradstreet's follow nearly the same fluctuations, reaching their highest points in 1913; the Gibson number has fluctuated more violently, reaching its highest point in 1912. The Gibson number, however, being representative only of foods, is comparable rather with the food groups of the more inclusive numbers. Thus the food group of the Labour Bureau's number rose to 133.9 in 1912 and fell to 131.6 in 1913 compared with a rise on the part of the Gibson number to 141.7 in 1912 and a recession to 131.5 in 1913. The 20 "farm products" of the departmental number went even higher, but the other groups all showed less extreme fluctuations.

There is a general similarity in the method of grouping employed by the Canadian and the United States departments, and more the important tendencies as between the two countries may be distinguished by comparing the two sets of figures. The general index number for the United States was steadily higher than the Canadian between 1900 and 1911, after which the latter forged ahead. Among the groups there appears general similarity of movement where the constituent elements are at all similar, as in metals, building materials, drugs and chemicals, and house furnishings.

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<sup>1</sup> Average wholesale prices in the United States according to the latest report of the Bureau of Labour "declined each year from 1890 to 1897, or eight years of constantly falling prices. From 1898 to 1913 was a period of advancing prices with only four of the 16 years showing a decrease from the prices of the previous year. These four years were 1901, 1904, 1908 and 1911. The decline of the 1908 prices from those of 1907 were heavier than the decline in 1901, 1904 or 1911. The extent of the recession in 1911 was nearly the same as in 1901, slightly more than in 1904, and much less than in 1908. Prices advanced sharply in 1912 and again slightly in 1913 to the highest point reached in the 24 years covered by this compilation. The lowest year of the 24-year period was 1897."

## THE COURSE OF PRICES IN THE UNITED STATES, 1890-1913; INDEX NUMBER OF PRICES WHOLESALE AND RETAIL.

Years.	WHOLESALE PRICES.											RETAIL PRICES.			
	Department of Labour.														
	Farm Products.	Food.	Cloths and Clothing.	Fuel and Lighting.	Metals and Implements.	Lumber and Building Materials.	Drugs and Chemicals.	House Furnishings Goods.	Miscellaneous.	All Commodities.	Gibsons Twenty-two Foods* (unweighted).	Bradtreet. One hundred and six commodities.*	Simple average of the index numbers of 15 articles of food in the United States.	Department of Labour.*	Index number of 15 articles of food in the United States weighted according to the average consumption of the various articles in working-men's families.
	(20) <i>a</i>	(55) <i>b</i>	(65) <i>c</i>	(13) <i>d</i>	(38) <i>e</i>	(28) <i>f</i>	(9) <i>g</i>	(14) <i>h</i>	(13) <i>i</i>	(25) <i>j</i>					
1890.....	100.3	107.9	106.3	86.6	98.9	95.9	95.2	104.8	100.5	102.1	98.2	.....	99.1	.....	98.9
1891.....	110.9	111.1	104.3	84.9	92.7	93.7	89.5	103.9	99.6	101.1	115.0	.....	100.7	.....	100.4
1892.....	102.1	99.4	102.1	83.7	87.9	88.8	88.9	100.4	96.7	96.0	102.5	.....	98.8	.....	98.6
1893.....	98.5	105.8	100.4	82.7	83.5	88.0	86.8	98.9	96.4	95.6	104.3	.....	101.7	.....	101.1
1894.....	87.5	95.8	80.6	76.5	75.3	83.2	77.6	94.3	90.9	86.9	98.2	.....	96.7	.....	96.3
1895.....	85.2	90.8	86.8	81.0	76.4	81.3	75.9	90.9	85.9	84.7	95.0	.....	94.5	.....	94.3
1896.....	71.5	80.4	85.5	86.5	77.7	80.8	80.0	88.6	83.1	81.8	76.9	.....	92.2	.....	92.4
1897.....	77.8	84.1	85.3	79.7	71.9	78.1	81.6	84.6	83.8	81.1	78.2	.....	93.7	.....	93.9
1898.....	87.8	90.6	87.4	78.9	71.7	82.8	92.1	86.7	84.0	84.5	87.5	.....	96.6	.....	96.8
1899.....	91.3	94.3	90.5	86.9	95.2	91.5	96.2	89.6	88.8	92.0	94.1	.....	97.8	.....	97.9
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....	100.0	.....	100.0
1901.....	106.7	101.6	94.6	98.8	92.9	100.9	99.6	104.6	97.8	98.2	100.8	.....	106.4	.....	105.3
1902.....	119.1	106.9	95.5	111.1	97.3	102.7	98.7	105.8	104.0	102.1	121.1	.....	113.5	.....	111.3
1903.....	108.5	102.9	99.9	123.5	97.6	105.8	97.3	106.6	103.5	102.8	110.9	.....	107.7	.....	111.4
1904.....	115.1	103.1	102.9	109.7	90.9	106.1	95.0	105.3	101.8	102.2	109.3	.....	113.6	.....	112.8
1905.....	113.5	104.4	104.9	105.6	101.6	110.4	94.3	102.9	102.8	104.9	107.1	.....	115.0	.....	112.8
1906.....	112.9	108.1	112.4	109.1	112.2	121.1	87.5	104.7	110.3	110.8	112.7	.....	113.0	.....	113.0
1907.....	125.3	112.9	118.5	111.7	119.0	126.9	94.7	111.7	115.8	117.2	115.2	.....	118.9	.....	116.8
1908.....	121.5	115.6	109.4	108.2	104.1	115.1	95.4	107.5	109.2	111.1	110.0	.....	124.4	.....	122.2
1909.....	139.8	119.7	111.9	106.9	103.6	119.6	97.1	105.3	114.7	114.5	134.0	.....	128.8	.....	126.3
1910.....	150.4	123.7	115.7	103.8	106.6	132.4	101.1	106.2	121.3	119.1	134.0	.....	136.3	.....	133.2
1911.....	147.9	126.1	111.9	101.3	99.1	130.8	103.9	104.6	119.5	116.9	134.2	.....	144.3	.....	138.9
1912.....	156.5	133.9	112.9	110.8	104.7	139.0	106.2	107.2	121.5	120.9	141.7	.....	153.4	.....	149.7
1913.....	151.4	131.6	115.7	117.7	105.9	131.2	107.3	111.3	124.9	122.3	131.5	.....	162.3	.....	158.6

(a) Barley, cattle. (b) Corn, cotton, flaxseed, hay, hides, hogs (2), hops, horses, mules, oats, poultry, rye, sheep (2), tobacco, wheat. (b) Beans, bread (4), butter (3), canned goods (3), cheese, coffee, eggs, fish (4), flour (4), fruit (4), glucose, lard, meal (2), meat (9), milk, molasses, poultry, rice, salt, soda, spices, starch, sugar (2), tallow, tea, vegetables (3), vinegar. (c) Bags, blankets (2), boots and shoes (4), broadcloths, calico, carpets (3), cotton flannels (2), cotton thread, cotton yarns (2), denims, drillings (2), flannels, gingham (2), horse blankets, hosiery (3), leather (4), linen shoe thread, overcoatings (2), print cloths, sheetings (6), shirtings (4), silk (2), suitings (4), tickings, trouserings, underwear (2), women's dress goods (6), wool (2), worsted yarns (2). (d) Candles, coal (7), coke, matches, petroleum (3). (e) Augers, axes, bar iron (2), bait wire, butts, chisels, copper (3), door knobs, files, hammers, lead, lead pipe, locks, nails (2), pig iron (4), planes, quicksilver, saws (2), shovels, silver, spelter, steel billets, steel rails, steel sheets, tin, tin plates, trowels, vises, wood screws, zinc. (f) Brick, carbonate of lead, cement (2), doors, hemlock, lime, linseed oil, maple, oak (2), oxide of zinc, pine (4), plate glass (2), poplar, putty, rosin, shingles (2), spruce, tar, turpentine, window glass (2). (g) Alcohol (2), alum, brimstone, glycerine, muriatic acid, opium, quinine, sulphuric acid. (h) Earthenware (3), furniture (4), glassware (3), table cutlery (2), woodenware (2). (i) Cottonseed meal, cottonseed oil, jute, malt, paper (2), proof spirits, rope, rubber, soap, starch, tobacco (2).

§ In continuation of Dun's Index Number. It includes wheat, flour (2), barley, oats, corn, corn meal, potatoes, rye, sugar (2), coffee, tea, beef (3), mutton (2), pork, bacon, hams, butter. † Breadstuffs, livestock, provisions and groceries, fruits, hides and leather, textiles, metals, coal and coke, oils, naval stores, building materials, drugs and chemicals, miscellaneous. The original number is constructed by adding together the prices of 1 pound of each commodity. This gives undue prominence to high priced articles. The fact that silver, silk, etc., have declined rapidly in recent years probably accounts for the small rise in the number, which, at January 1, 1914, stood at 110.8. \* Sirloin steak, round steak, rib roast, pork chops, bacon smoked, ham smoked, lard (pure), hens, flour, wheat, corn meal, eggs (strictly fresh), butter (creamery), potatoes (Irish), sugar (granulated), milk (fresh).

(2) *Retail Prices.*—The index numbers of retail prices herewith given are the weighted and unweighted numbers of the United States Bureau of Labour Statistics. As at present computed, the number is based on prices of 15 articles of food,<sup>1</sup> with anthracite and bituminous coal and household gas, in 40 of the most important industrial cities of the United States. The data is obtained from approximately 760 retail stores, 140 bakeries, 250 retail coal dealers, and 65 gas companies. The 40 cities represent 32 states.<sup>2</sup>

On the whole the American retail price record shows a more rapid advance than the Canadian between 1900 and 1913, viz., 58 per cent compared with 38 per cent. The rise has been steady and the widening of the "spread" between the two persistent. The American number, of course, contains only about half as many articles as the Canadian. This fact gives a preponderating importance to the influence of meat prices, in which the rise during recent years has been very marked in the United States. In 1913, bacon was 104.8 per cent higher than in 1900; pork chops, 96.3 per cent, and round steak 81.7 per cent. The meat product which has advanced the least is lard, yet this has gone up 58.8 per cent. Intervening come roasting beef, hams, and sirloin steak. Eggs have also showed a rapid advance, 76.4 per cent. Other advances are, butter, 51.2 per cent, potatoes 63.0, milk, 40.2, flour 34.7, corn meal 68.3, and hens 72.5. Only one commodity was lower on the average in 1913 than in 1900, namely, sugar, which was down 8.3 per cent.

<sup>1</sup> Namely, sirloin steak, rib roast, pork chops, bacon smoked, lard, hens, wheat, flour, corn, milk, eggs, starch, creamery butter, potatoes and granulated sugar. The weights used in the second number represent average working class consumption as revealed by an investigation conducted by the Bureau in 1901. (Eighteenth Annual Report of the U.S. Commissioner of Labour.)

<sup>2</sup> The method of collection at present followed by the Bureau was only recently adopted. From 1890 to 1907 thirty articles were included in the index number in a varying number of cities in 33 states. In order to make the results continuous the index number for each commodity in 1907 "was found by proportion," i.e., raised or lowered according to the increase or decrease compared with the average of the prices for 1906 from the same number of returns. (Bulletin of the U.S. Bureau of Labour, No. 77, July, 1908, page 213.)



## DIRECT COMPARISON OF RECENT PRICE TENDENCIES IN CANADA AND THE UNITED STATES.

(1) *Wholesale Prices*.—The official statistics of the two countries include 135 articles common to both. Of these, 84 have gone up in both countries, but 46<sup>1</sup> have gone up faster in Canada than in the United States, while 38<sup>2</sup> have gone up faster in the United States than in Canada. Altogether 20 articles have gone down in both countries; in the case of 10<sup>3</sup> of these the declines have been more marked in Canada than in the United States, whereas in 10<sup>4</sup> others the reverse was the case. In five<sup>5</sup> cases the tendency was the same. In the remaining 26<sup>6</sup> articles, the price tendency has varied, being upward in one country and downward in the other. The final comparative index number is as follows:—

## TREND OF WHOLESALE PRICES IN CANADA AND THE UNITED STATES, 1900-1913.

No. of articles, 135.

Prices 1900=100.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100·	100·8	101·9	102·8	103·6	107·8	110·8	116·2	112·7	113·6	117·5	120·0	128·0	127·7
United States...	100·	99·1	103·9	103·3	102·8	104·5	110·8	117·6	110·0	113·2	118·0	118·4	122·6	119·6

1. Namely, hay, rye, wheat, beef, cattle, sheep, eggs, milk, salmon, beans, potatoes, flour (two lines), rice, coffee, salt, denim, ticking, shirting, saxon, gingham (two lines), leather (three lines), boots and shoes (three lines), steel billets, coal, bituminous (two lines), pine, shingles, maple, oak, bricks, white lead, kitchen chairs, kitchen tables, alcohol, alum, glycerine, malt, rope and starch.

2. The articles which have gone up faster in the United States than in Canada are as follows: barley, corn, bacon, ham, hogs, lard, mutton, pork, butter (two lines), cheese, cod fish, salted herring, apples, prunes, prints, bread, glucose, jute, flannelette, hides, tallow, spelter, tin, zinc, axes, vices, coal (anthracite), coal oil, pine (two lines), spruce, lime, tar, rosin, pails, brimstone, opium.

3. Namely, flax, raisins, currants, soda, bicarbonate of copper, silver, cement, turpentine, table cutlery, alcohol.

4. Namely, granulated sugar, iron, common bar, coke, nails (two lines), wire, iron, linseed oil, tumblers, quinine, paper.

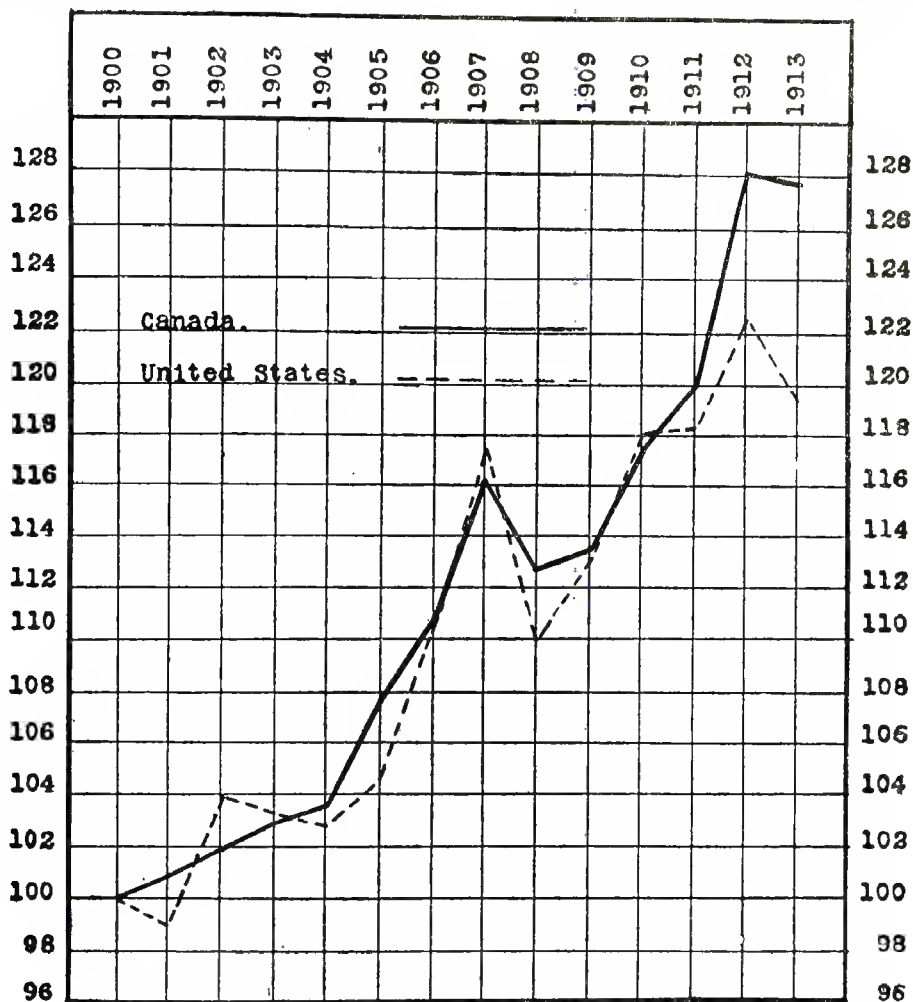
5. Namely, cotton, upland middling; silk (raw) (two lines), wire, rubber.

6. Namely, oats, mackerel salted, onions, biscuits, tea, molasses, pepper, vinegar, wool, yarn, pig iron, tinplates, lead, screws, coal oil, matches, lead pipe, putty, window glass, bedroom sets, cups and saucers, dinner sets, tubs, muriatic acid, sulphuric acid, tobacco.

## WHOLESALE PRICES IN CANADA AND THE UNITED STATES, 1900-1913.

Number of Articles, 135.

Prices in 1900=100.



It will be seen that the trend of wholesale prices in the two countries has been very similar, though the lines vary slightly in direction from time to time. In 1906, after a somewhat more erratic course in the United States, they came together on exactly the same level compared with 1900. The setback to commodity prices following the financial crisis of 1907 was apparently more severe in the United States, the drop in the line having been 7.6 points compared with 3.5 in Canada. Ever since 1909, in fact, the Canadian line has remained above that of the United States. The boom of 1912 was more pronounced in Canada, sending the line up 8 points as compared with 4.2 in the United States. The subsequent decline was also less marked here than in the neighbouring republic. The whole story of the accompanying diagram, in short, except during 1912, seems to be that prices obey the same general influences but that they move more conservatively in Canada than in the United States.

(2) *Retail Prices.*—The official statistics of retail prices of Canada and the United States enable direct comparison to be made of the course followed by 11 articles of food from 1900 to 1913, namely, sirloin steak, roasting beef, fresh pork, smoked bacon, pure lard, fresh eggs, creamery butter, milk, flour, granulated sugar and potatoes. Weighted index numbers showing the course of these articles taken together in the two countries are as follows:

## TREND OF RETAIL PRICES IN CANADA AND THE UNITED STATES, 1900-1913.

No. of articles, 11.

Prices 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	111.9	135.2	147.0	148.4	151.9
United States.....	100.0	113.9	139.9	141.0	150.8	155.5

The cost of living on this showing has gone up somewhat faster since 1900 in the United States than in Canada, except during the past two years. Between 1900 and 1905, the United States number went up 13.9 points while the Canadian number advanced 11.9. In the ensuing 5 years the United States number advanced 26 points while the Canadian number advanced 23.3 points. In 1910, however, the United States number went up only 1.1 points while the Canadian number went up 11.8 points. The lead which the Canadian number gained by this advance in 1911 was lost in 1912, during which year the United States number went up 9.8 points while the Canadian number moved up only 1.4. In 1913 again the American number went up 4.7 points while the Canadian number went up only 3.4 points. The number of articles included in the comparison is, of course, limited.

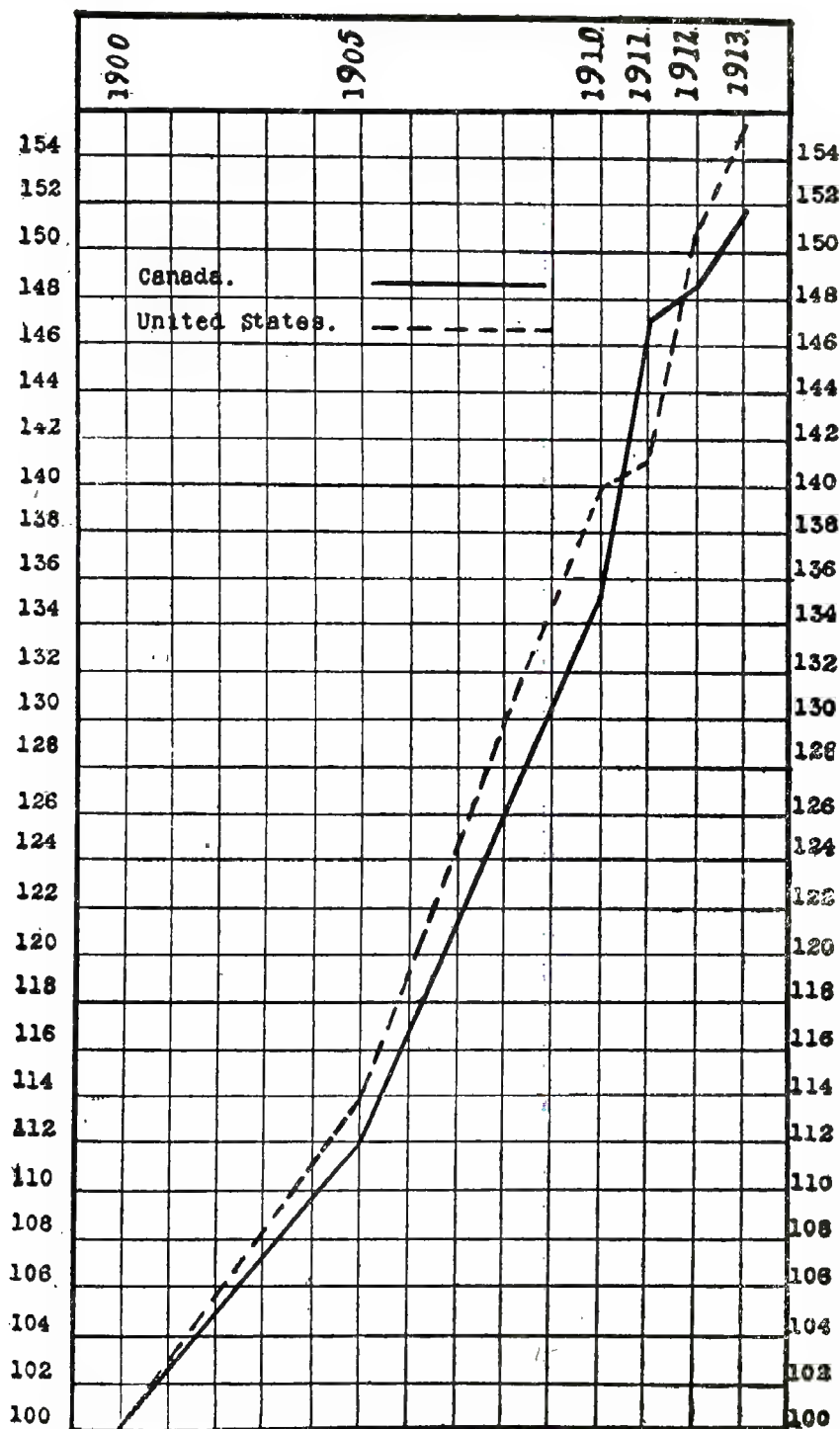
Of the eleven commodities included in the comparison six rose more rapidly in the United States than in Canada. Fresh pork nearly doubled in price in the United States, whereas the advance in Canada was about two-thirds. Bread went up 60 per cent in the United States compared with 40 per cent in Canada, butter 51 per cent in the United States compared with 39 per cent in Canada, flour 35 per cent compared with 32 per cent, and potatoes 63 per cent compared with 53 per cent. The five remaining commodities which went up faster in Canada than in the United States were sirloin steak, with an advance of 71 per cent in Canada compared with 60 per cent in the United States, roasting beef 61 per cent in Canada against 57 per cent in the United States, eggs 92 per cent compared with 76 per cent, milk 49 per cent compared with 40 per cent and sugar 5 per cent compared with a decline of 8 per cent in the United States.

## COMPARISON OF PRESENT PRICES IN THE UNITED STATES AND CANADA.

The table herewith exhibits a budget of 11 commodities worked out in average prices as in December, 1913, of the United States and Canada. As already explained, the United States figures represent the average for 40 cities and the Canadian the average for 56 cities. The list of commodities includes all that are common to the official statistics of the two countries.

It will be seen that the Canadian prices of potatoes and butter are considerably lower, and the prices of sirloin steak, pork chops and bacon slightly lower, than the American; the Canadian and American prices of chuck roast and milk are the same, while the American prices of lard, eggs, flour and sugar are by a good margin below the Canadian. The budget works out at about 4 per cent higher in the United States

RETAIL PRICES OF FOODS IN CANADA AND THE UNITED STATES, 1900-1913.  
 Number of Articles, 11. Prices in 1900=100.



than in Canada. It is to be remembered, of course, that the character of the localities represented is different, the Canadian average reflecting a considerable number of towns of 10,000-20,000 population whereas the American list is confined to large cities.

That prices tend to be about the same in the two countries is borne out by an examination of the figures for neighbouring cities. The differences which exist in grades and standards make close comparisons perilous. Eastern Canadian cities compared with Boston have somewhat lower prices. The larger Ontario cities in turn are a shade higher than the neighbouring American cities, and this tendency naturally becomes more marked in the West. As already stated, however, close comparisons of this kind to be final require data of a different sort than those herewith available.

BUDGET AT RETAIL PRICES IN THE UNITED STATES\* AND CANADA†.  
IN DECEMBER, 1913.

Commodity.	Quantity Consumed per Week.	Price (per unit).		Cost per Week.	
		U.S. cents.	Canada. cents.	U.S. cents.	Canada cents.
Sirloin steak, lb.....	2 lb.	25·6	23·3	51·2	46·6
Chuck roast, lb.....	2 lb.	15·9	15·9	31·8	31·8
Pork chops, lb.....	2 lb.	20·6	20·5	41·2	41·0
Bacon, lb.....	1 lb.	27·5	26·	27·5	26·0
Lard, lb.....	2 lb.	15·8	18·4	31·6	36·8
Eggs, doz.....	2 doz.	44·9	49·4	89·8	98·8
Butter, lb.....	3 lb.	40·1	35·4	120·3	106·2
Milk, qt.....	6 qts.	9·1	9·1	54·6	54·6
Flour, 25 lb. bag.....	10 lb.	78·3	82·5	31·3	33·0
Sugar, granulated, lb.....	6 lb.	5·3	5·5	31·8	33·0
Potatoes, peck.....	2 pks.	27·5	18·5	55·0	37·0
				\$5·66	\$5·45

\*Average prices in 40 representative cities in United States.

†Average prices in fifty-six cities in Canada.

BUDGET AT RETAIL PRICES IN BOSTON AND MONTREAL IN DECEMBER, 1913.

Commodity.	Quantity consumed per week.	Price (per unit.)		Cost per Week.	
		Boston. Cents.	Montreal. Cents.	Boston. Cents.	Montreal. Cents.
Sirloin steak, lb.....	2 lbs.	36·2	23·0	72·4	46·0
Chuck roast, lb.....	2 lbs.	16·2	12·5	32·4	25·0
Pork chops, lb.....	2 lbs.	22·0	19·5	44·0	39·0
Bacon, lb.....	1 lb.	24·4	24·0	24·4	24·0
Lard, lb.....	2 lbs.	15·8	20·0	31·6	40·0
Eggs, doz.....	2 doz.	57·2	75·0	114·4	150·0
Butter, lb.....	3 lbs.	38·1	32·5	114·3	97·5
Milk, qt.....	6 qts.	8·9	10·0	53·4	60·0
Flour, 25 lb. bag.....	10 lbs.	88·7	85·0	35·5	34·0
Sugar, lb.....	6 lbs.	5·3	5·0	31·8	30·0
Potatoes, peck.....	2 pecks	25·8	25·0	51·6	50·0
				\$6·06	\$5·96



## BUDGET AT RETAIL PRICES IN BUFFALO, N.Y., AND TORONTO IN DECEMBER, 1913.

* Commodity.	Quantity consumed per week.	Price (per unit.)		Cost per Week.	
		Buffalo. Cents.	Toronto. Cents.	Buffalo. Cents.	Toronto. Cents.
Sirloin steak, lb.	2 lbs.	21.8	27.5	43.6	55.0
Chuck roast, lb.	2 lbs.	15.2	17.0	30.4	34.0
Pork chops, lb.	2 lbs.	17.7	20.0	35.4	40.0
Bacon, lb.	1 lb.	20.8	23.5	20.8	23.5
Lard, lb.	2 lbs.	14.2	18.0	28.4	36.0
Eggs, doz.	2 doz.	47.2	52.5	94.4	105.0
Butter, lb.	3 lbs.	39.3	30.0	117.9	90.0
Milk, qt.	6 qts.	8.0	10.0	48.0	60.0
Flour, 25-lb. bag.	10 lbs.	72.2	67.5	28.9	27.0
Sugar, lb.	6 lbs.	5.2	5.0	31.2	30.0
Potatoes, peck.	2 lbs.	26.2	28.7	52.4	57.4
				\$5.31	\$5.58

## BUDGET AT RETAIL PRICES IN WINNIPEG AND THE AVERAGE OF RETAIL PRICES IN ST. PAUL AND MINNEAPOLIS IN DECEMBER, 1913.

Commodity.	Quantity consumed per Week.	Price (per Unit).		Cost per Week.	
		St. Paul & Minneapolis. Cents.	Winnipeg. Cents.	St. Paul & Minneapolis. Cents.	Winnipeg. Cents.
Steak, sirloin, lb.	2 lbs.	22.4	25.0	44.8	50.0
Chuck roast, lb.	2 lbs.	15.0	16.0	30.0	32.0
Pork chops, lb.	2 lbs.	17.1	22.0	34.2	44.0
Bacon, lb.	1 lb.	25.7	35.0	25.7	35.0
Lard, lb.	2 lbs.	15.2	18.0	30.4	36.0
Eggs, doz.	2 doz.	38.3	45.0	76.6	90.0
Butter, lb.	3 lbs.	36.9	35.0	110.7	105.0
Milk, qt.	6 qts.	7.8	10.0	46.8	60.0
Flour, 25-lb. bag.	10 lbs.	69.5	80.0	27.8	32.0
Sugar, lb.	6 lbs.	5.1	6.5	30.6	39.0
Potatoes, peck.	2 lbs.	21.9	25.0	43.8	50.0
				\$5.01	\$5.73

## (III).—OTHER BRITISH DOMINIONS—AUSTRALIA, NEW ZEALAND, SOUTH AFRICA AND INDIA.

(1) *Australia.*

The Labour and Industrial Branch of the Commonwealth Bureau of Census and Statistics has carried out a thorough investigation into the course of prices and the cost of living during recent years. The results are presented under four headings.

(1) An initial inquiry into household incomes and expenditures in 1911 yielded some interesting data, though insufficient for general conclusions.<sup>1</sup> It disclosed the fact that the distribution of the family expenditures in Australia is as follows: rent, 16.3 per cent; food, 28.4 per cent; clothing, 12.3 per cent; fuel and lighting, 3.4 per cent; and other items, 39.6 per cent—a valuable guide in the subsequent investigations into prices.

<sup>1</sup> Prices, Price Indexes, and Cost of Living in Australia. (Report No. 1) pp. 11-15.

(2) The first of the prices investigations covered "retail prices, house rents and the cost of living."<sup>1</sup> The retail prices of 46 articles<sup>2</sup> (18 being classified as groceries, 7 under the heading of dairy produce, and 21 as meats) were obtained in each quarter of each year back to 1901 in the capital town of each of the six states. The index numbers based on these statistics follow:—

INDEX NUMBERS\* OF RETAIL PRICES IN METROPOLITAN TOWNS\*\* IN AUSTRALIA  
1901 to 1912.

(Base Prices in 1911=100.)

Year.	Groceries	Dairy Produce.	Meat.	All
1901.....	100.0	100.0	100.0	100.0
1902.....	102.5	113.0	113.6	108.6
1903.....	103.8	106.0	105.4	104.8
1904.....	95.2	92.2	97.3	95.1
1905.....	107.1	98.1	96.1	101.4
1906.....	105.4	98.8	95.6	100.8
1907.....	96.8	101.1	97.5	98.2
1908.....	106.9	114.5	97.1	106.1
1909.....	106.6	108.2	94.5	103.5
1910.....	109.2	105.6	93.0	103.4
1911.....	109.2	105.8	90.8	102.8
1912.....	120.7	120.3	101.8	115.0
1913.....				112.7

\*These index numbers are average percentages, weighted according to consumption and population in each case.

\*\*Sydney, Melbourne, Brisbane, Adelaide, Perth and Hobart.

The rise in retail prices in Australia since 1901 has apparently been in the neighbourhood of 13 per cent. There was a rapid move upward in 1902, but a drop in 1904. The year 1908 again was high, but 1911 saw little change from 1900. A very rapid rise (14 per cent) took place in 1912 with a recession in 1913. In groceries, a rapid rise appeared in 1912. In dairy produce, prices were high in 1902, 1908 and 1912, which were years of drought; prices were lowest in this group in 1904, a year of low prices for groceries and meat. Meats showed rises in the drought years. It should be added that a more comprehensive investigation embracing 30 towns throughout Australia begun in 1911 shows that cost of living was practically stationary as between 1912 and 1913. Groceries and dairy products have declined, but meats and house rents have gone up. The following table of index numbers illustrates this:—

<sup>1</sup> Prices, Price Indexes, and Cost of Living in Australia. (Report No. 1) pp. 15-42.

<sup>2</sup> Bread, flour (ordinary), tea, coffee, sugar, rice, sago, jam, oatmeal, raisins, currants, starch, blue, candles, soap, potatoes, onions, kerosene, milk, butter, cheese, eggs, bacon middles, bacon shoulder, ham, beef sirloin, rib, flank, shin, steak rump, shoulder, buttock, cornered round, brisket with bone, brisket without bone, mutton leg, shoulder, loin, neck, chops loin, chops leg, chops neck, pork leg, loin, belly, chops.

## COST OF LIVING INDEX NUMBERS.

(Retail Prices and Rents in Thirty Towns in Australia, 1912 and 1913.)

(Average for the year 1912 = 100.0.)

	Groceries.	Dairy Produce	Meat	House Rents	All
1912.....	100.0	100.0	100.0	100.0	100.0
January-March.....	93.5	97.7	89.1	96.8	94.7
April-June.....	97.8	104.8	93.8	99.2	98.8
July-September.....	102.6	102.7	110.8	101.8	103.7
October-December.....	106.1	94.8	106.7	102.0	102.7
1913.....	92.8	97.0	104.2	104.8	100.0
January-March.....	94.0	97.9	103.3	103.4	99.8
April-June.....	94.8	100.4	104.7	104.7	101.2
July-September.....	92.2	95.4	105.2	105.1	99.8
October-December.....	90.2	94.3	103.4	106.1	99.2

Roughly comparing the above Australian index numbers (of 46 foods in 6 cities) with the corresponding Canadian index numbers of prices at retail (of 29 foods in 56 localities) the latter would seem to have advanced more rapidly than the former. For the final year the Canadian index number of 144.1 compares with an Australian number of 112.7. The more exact comparison on a later page, however, somewhat lessens this disparity.

The following table of current retail prices in metropolitan cities in 1912 (being the latest official statistics available), will enable some interesting comparisons between Canada and Australia:—

## RETAIL PRICES IN METROPOLITAN CITIES, AUSTRALIA, 1912.

Article.	Quantity.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 30 cities.
		s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Bread.....	2 lbs.	3 4	3 0	3 5	3 5	3 5	3 5	3 3
Flour.....	25 lbs.	2 10 9	2 7 1	3 2 1	2 9 6	2 8 4	3 0 9	2 9 8
Tea.....	per lb.	1 4 1	1 2 7	1 4 4	1 4 5	1 3 8	1 3 4	1 3 8
Coffee.....	"	1 6 3	1 6 6	1 7 1	1 6 2	1 7 3	1 6 0	1 6 5
Sugar.....	"	2 8	2 9	3 0	2 9	3 0	3 0	2 9
Rice.....	"	2 8	2 8	2 6	3 3	2 9	3 0	2 9
Sago.....	"	2 9	2 9	2 8	3 2	3 0	3 2	3 0
Oatmeal.....	"	3 0	2 8	2 8	2 9	2 9	2 8	2 9
Starch.....	"	5 6	5 3	5 5	5 5	5 9	6 0	5 6
Soap.....	"	3 0	3 6	2 4	2 6	2 9	3 1	3 1
Potatoes.....	14 lb.	1 8 6	1 4 1	1 11 4	1 6 5	1 9 8	1 7 2	1 7 4
Onions.....	per lb.	2 2	2 0	2 1	2 3	2 4	2 6	2 2
Kerosene.....	gallon	1 0 8	1 0 3	1 0 7	1 2 1	1 0 5	1 2 6	1 1 4
Milk.....	quart	5 0	4 6	4 8	6 0	6 9	5 0	5 1
Butter.....	per lb.	1 3 2	1 3 7	1 3 6	1 4 8	1 4 4	1 3 8	1 3 6
Cheese.....	"	11 7	11 4	11 1	11 5	11 8	11 7	11 6
Eggs.....	per doz.	1 6 9	1 5 4	1 5 6	1 2 9	1 8 4	1 4 4	1 5 7
Bacon, middle.....	per lb.	11 2	1 0 2	10 6	11 5	1 0 7	11 1	11 6
Ham.....	"	1 0 3	1 0 6	1 2 3	1 0 3	1 1 9	1 1 2	1 0 8
Beef.....	"	6 2	6 4	4 4	5 8	7 5	6 8	6 2
Fresh sirloin steak.....	"	8 4	8 9	6 3	8 1	11 7	8 6	8 5
Rump steak.....	"	4 3	4 6	3 7	4 5	7 0	5 5	4 7
Shoulder steak.....	"	4 3	5 2	3 7	4 9	7 0	6 3	5 0
Buttock mutton.....	"	4 1	4 3	4 6	4 4	7 7	5 6	4 7
Leg mutton.....	"	3 5	3 4	3 1	3 6	6 6	4 7	3 8
Shoulder Chops.....	"	4 9	4 9	5 1	5 3	8 1	6 2	5 3
Leg chops.....	"	4 2	3 6	5 1	4 4	6 5	5 1	4 4
Neck pork.....	"	8 0	6 7	7 0	7 3	9 0	6 5	7 4
Leg pork chops.....	"	8 9	7 7	7 9	8 2	9 6	7 3	8 2

(3) The third investigation covers wholesale prices in Melbourne markets.<sup>1</sup> The commodities (80 in number up to 1911, thereafter 92) are chiefly raw materials, distributed in 8 groups. Back to 1890 the index numbers are shown in the accompanying table:—

AUSTRALIAN WHOLESALE INDEX NUMBERS BY GROUPS.

Year.	Metals and coal (1)	Jute, leather, etc. (2)	Agri-cultural products (3)	Dairy produce (4)	Groceries (5)	Meat (6)	Building materials (7)	Chemicals (8)	All Commodities together (weighted).
1890.....	134.5	105.8	145.3	131.1	103.3	86.2	96.5	137.9	117.8
1891.....	85.9	98.3	145.6	118.7	99.3	76.0	85.6	131.4	105.7
1892.....	85.3	92.9	138.1	127.2	95.9	77.1	77.2	126.5	102.7
1893.....	82.1	90.9	118.6	100.4	99.4	69.8	81.1	112.1	95.0
1894.....	72.1	83.7	91.6	84.4	101.7	59.5	80.2	102.7	83.9
1895.....	69.1	79.4	104.4	84.9	97.7	58.3	86.6	110.4	85.0
1896.....	77.5	86.9	158.7	104.4	98.2	69.1	85.6	117.2	103.5
1897.....	78.1	81.9	151.2	111.9	97.1	91.7	84.0	106.9	103.4
1898.....	80.8	79.3	130.8	123.3	96.2	93.4	92.9	102.7	100.1
1899.....	89.5	83.2	95.3	97.1	96.5	82.1	88.3	98.2	90.5
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	101.8	89.8	131.6	122.7	100.8	115.1	92.3	100.9	108.9
1902.....	96.6	87.7	169.5	144.9	90.9	123.8	91.8	97.0	117.6
1903.....	88.5	96.8	171.9	126.3	90.0	123.5	96.0	101.4	117.3
1904.....	78.8	102.7	107.2	104.5	83.1	122.1	92.7	96.3	99.5
1905.....	74.1	98.7	127.1	116.9	90.6	103.5	87.9	94.5	101.8
1906.....	84.6	113.5	130.2	115.9	88.8	95.0	98.3	95.1	106.0
1907.....	99.5	118.1	138.4	121.7	91.2	110.7	106.2	105.8	114.7
1908.....	99.1	104.6	186.6	142.9	93.1	114.2	102.6	98.1	124.7
1909.....	97.3	105.3	142.2	133.5	94.1	93.1	100.0	89.7	111.6
1910.....	96.3	122.1	137.8	131.2	96.1	86.3	109.3	98.8	112.2
1911.....	95.9	116.1	142.2	119.3	96.2	85.6	109.7	110.1	111.9
1912.....	97.9	115.1	194.5	143.9	101.2	116.2	116.0	107.7	131.3
1913.....	*	*	*	*	*	*	*	*	121.7

\*Average for year not available.

(1) Iron-pig mixed nos., rod and bar, angle and tee, plate, hoop, galvanized corrugated, wire fencing, zinc sheet, lead sheet and piping, copper sheet, coal (on wharf).

(2) Jute goods—bran bags, corn sacks, wool packs. Leather—kip, calf, basils, cotton raw, silk raw, wool.

(3) Wheat, flour, bran, pollard, oats, oatmeal, barley, malting and feed, maize, hay and straw, peas and potatoes.

(4) Ham, bacon, cheese, butter, lard, eggs, honey.

(5) Currants, raisins, herrings, salmon, sardines, tea, coffee, cocoa, sugar, macaroni, sago, rice, salt fine and rock, mustard, starch, blue, matches, candles, kerosene, tobacco.

(6) Beef, mutton, lamb, veal, pork.

(7) Timber—flooring, 6 x 1½, 6 x 2, 6 x 2½, 6 x 3, weatherboards, Oregon, shelving, cement, white lead.

(8) Cream of tartar, carbonate of soda, saltpetre, sulphur.

It will be seen that from 1890 to 1895 was a period of falling prices; (in 1894 prices in Australia were 50 per cent below those of 1873). By 1900, however, a recovery had been made to the level of 1890. Commenting on the years of the present century the Commonwealth Statistician says:

"The rise which began in 1898-9 continued for three years, and again the increase is most noticeable in regard to the groups comprising foodstuffs. This rise followed on the severe drought of 1901-2, and after being maintained for one year was succeeded by a sudden fall from 1,049 in 1903 to 890 in 1904. In that year a rise again set in, and was maintained for several years, culminating in 1908, when there was again a drought. In 1909 the price-index fell to a level

<sup>1</sup> Prices, Price Indexes, and Cost of Living in Australia (Report No. 1) pp. 48-66.

which was substantially maintained for two years." During the year 1912 there was a sharp rise in the index-number. The increase is again most marked in the groups comprising foodstuffs, and was no doubt largely due to the drought in the earlier part of the year."

At the end of 1913 prices were considerably lower than at the end of 1912. The following were the chief features of the movement by groups:

*Metals and Coal.*—After a steady fall from 1873 to 1895, there was a rise till 1900, the year of the highest level of this group. Prices have been fairly constant since, but metals were up in the latter part of 1912. In Australia, the commodities in this group except coal were stated to depend on the world's markets.

*Textiles and Leather.*—Until 1898, there appeared a decline, but a fairly marked rise was noted since.

*Agricultural Produce.*—As the production of wheat in Australia depends chiefly upon the rainfall, prices were noticeably upward in the drought years of 1888, 1895, 1902, and 1907-8. Prices of flour and bread reflected these conditions.

*Dairy Produce.*—Butter and cheese prices were reported as reflecting weather conditions from year to year.

*Groceries.*—These commodities, being mainly imported, reflected the movement in other parts of the world.

*Meat.*—The level was highest in 1902, a year of drought. There was a marked decline from 1890 to 1895.

*Building Materials.*—The level was lowest in 1892 and from that year until 1912 a fairly steady rise took place.

*Chemicals.*—A steady decline was noted from 1873 till 1909, with the exception of recoveries in 1880, 1890 and 1896. Prices recovered again in 1910 and 1911, but fell in 1912, this being the only group which showed a decline in that year.

Comparison between the Australian group numbers above given with the similar numbers for Canada affords some interesting generalizations. Taking the first Australian group, namely, metals and coal, a decline is shown though the corresponding group in Canada, namely, metals and implements and fuel and lighting, show small rises. In leather products also prices would seem to be more buoyant in Canada. Textiles have fared about the same. In agricultural products the rise has been very rapid in both countries, Australia showing the higher level in several years. Dairy products similarly have gone up rapidly, and by approximately the same extent in both countries. Groceries have advanced more rapidly in Canada. The steady and material advance in meat prices in Canada compares with a tendency to fluctuate violently both above and below the base year. Building materials were high in price in Australia in the base year, 1900, and remained lower than that year until 1906 (inclusive), rising in price from that time to 1912; Canadian prices on the other hand steadily advanced from 1900 to the present, being 119.8 in 1911 and 119.4 in 1912, against the Australian number of 109.7 in 1911, and 116.0 in 1912.



(4) An index number of import and export values has also been constructed for Australia. The list of commodities (41) is very much the same as that on which the United Kingdom Board of Trade Index Number is based. Results are shown in the following table:—

## COMMONWEALTH IMPORT AND EXPORT VALUES.

(Prices 1901=100).

Year.	1 Metals and coal.	2 Textiles.	3 Agri- cultural produce.	4 Meat, dairy produce, etc.	5 Groceries, etc.	3, 4 and 5 Food and groceries.*	6 Miscell- aneous.	All groups.*
1901.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1902.....	97.0	113.4	114.4	103.2	97.5	105.9	95.4	105.3
1903.....	89.0	121.2	97.6	101.5	96.2	99.4	86.0	100.8
1904.....	84.9	128.1	80.0	93.6	91.3	88.4	89.6	95.5
1905.....	82.9	125.3	107.5	90.8	90.7	96.1	91.8	99.6
1906.....	92.0	129.7	107.6	90.8	89.4	95.9	92.5	101.1
1907.....	97.3	135.2	93.1	95.0	101.1	95.4	95.7	102.6
1908.....	93.8	120.8	129.9	102.7	100.8	111.0	92.1	109.0
1909.....	91.6	120.4	122.3	93.5	94.3	102.6	99.1	104.5
1910.....	93.7	138.8	116.9	96.1	97.6	102.8	103.9	108.6
1911.....	95.6	137.0	113.1	102.3	100.6	105.4	102.1	109.8

\*Weighted average.

The table shows that the index number for all groups combined, after rising in 1902, declined in the next two years, reaching its minimum in 1904. During the following four years it steadily rose and in 1908 the price level was nearly as high as in 1911. In 1909 prices fell, but rose again during the next two years, the maximum being reached in 1911. It should be observed that the high prices in 1902 and 1908 are almost entirely due to the droughts which occurred in these years, and which consequently increased prices in Groups 3 (Agricultural Produce) and 4 (Meat, etc.).

In a comparison of the index numbers computed from import and export values for the whole commonwealth with the index numbers published by the Labour Department of the Board of Trade of Great Britain, the items in the two calculations being almost uniform, the trend is almost identical, except in the years 1902 and 1908, years of drought in Australia and therefore of high prices for agricultural products, and in 1904, when low prices prevailed in Australia. Generally speaking, the index numbers for Australia show more violent fluctuations than those of other countries on account of the effect of the periodical droughts.

A comparison of the index numbers of wholesale prices and retail prices, including rent, at Melbourne only, indicated that wholesale prices had increased in the period 1901-5 to 1911-12, about 111.5 per cent, as against an increase in retail prices and rent of 13.8 per cent. Comparing, however, the advance in retail prices of groceries and food only with that in the wholesale prices of these lines only, retail prices showed an advance of only 4 per cent, as compared with an advance of 6 per cent, in wholesale prices.

## DIRECT COMPARISON OF RECENT PRICE TENDENCIES IN CANADA AND AUSTRALIA.

(1) *Wholesale Prices.*—A rough comparison between the Australian official group index numbers with the similar numbers for Canada has been already made. A more exact comparison based on an identical list of commodities in each country (the official

statistics of wholesale prices in Canada and Australia include 52 articles common to both<sup>1</sup>) is as follows:—

## TRENDS OF WHOLESALE PRICES IN CANADA AND AUSTRALIA, 1900-1913.

Number of articles, 52.

Prices in 1900=100.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100.0	98.6	104.2	105.0	102.7	105.1	109.5	120.5	117.2	120.2	122.7	133.4	134.9	127.8
Australia..	100.0	104.5	115.2	110.3	94.4	100.9	103.5	107.7	118.4	109.3	109.5	106.3	124.3	.....

In the first three years of the century, wholesale prices were apparently more buoyant in Australia than in Canada. They fell back, however, in 1904, and remained comparatively quiescent until 1908, in which year they went up with extreme rapidity to a level slightly higher than that of the similar price list in Canada. In the three following years, however, they again relapsed while Canadian prices went steadily and rapidly forward. Again, however, in 1912, there was a very rapid increase in Australian prices, but though the number showed the remarkable gain of 18 points in a single year the new level did not reach as high a point as that attained by the steady progress of Canadian prices. The chart herewith exhibit at a glance the tendency to violent rises which Australian prices show as compared with Canadian at the same time that they maintain a greater general steadiness over long periods.

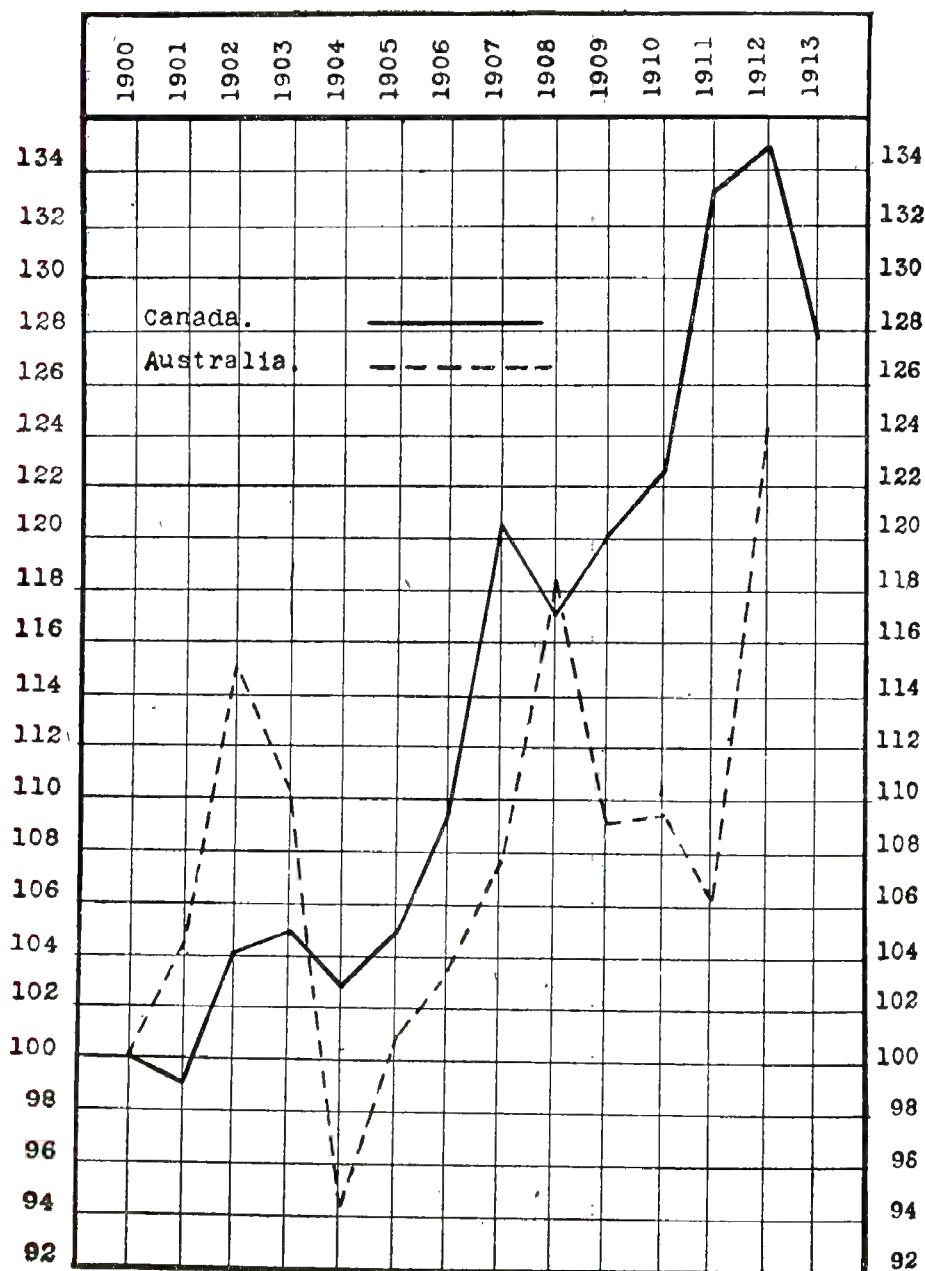
Of the 52 commodities on which the above comparisons are based, 33 articles were higher in both countries in 1912 than in 1900. Among these, 17 went up faster in Canada than in Australia (namely, bran, corn, peas, shorts, straw, beef, lamb, pork, eggs, oatmeal, coffee, sugar, salt, raw cotton, zinc sheets, coal and starch); on the other hand, 16 reached a comparatively higher level in Australia (namely, barley, hay, oats, wheat, bacon, ham, lard, mutton, butter, cheese, potatoes, flour, rice, matches, sulphur and tobacco). Six articles went down in both countries, galvanized iron and cement having sagged to a greater extent in Canada than in Australia, whereas currants, raisins, iron bar, and wire fencing went down more in Australia than in Canada. In the case of the following articles the price tendencies were up in one country and down in the other: veal, herrings, salmon, cocoa, tea, honey, cream of tartar, soda, wool, silk, pig iron, lead pipe, and white lead. The exact figures for each of the above will be found in the Appendix (Table A).

<sup>1</sup>Namely: (1) *Grains and fodder*: wheat, barley, oats, peas, corn, hay, straw, bran and shorts. *Meats*: beef, veal, mutton, lamb, pork, bacon, ham and lard. *Fish*: herrings and salmon. *Dairy Products*: butter, cheese, eggs. *Other foods*: flour, oatmeal, rice, potatoes, currants, raisins, tea, coffee, cocoa, sugar, honey, salt, soda and cream of tartar. *Metals, etc.*: pig iron, iron bars, galvanized iron, zinc sheets, lead pipe, white lead, wire fencing and coal. *Textiles*: cotton, wool and silk. *Miscellaneous*: cement, matches, sulphur, tobacco and starch.

## WHOLESALE PRICES IN CANADA AND AUSTRALIA, 1900-1913.

Number of Articles, 52.

Prices in 1900=100.



(2) *Retail Prices*.—The official statistics of retail prices of the two countries enable the direct comparison of 19 articles of food to be made. The index numbers for these taken together, weighted,<sup>1</sup> are as follows:

## TREND OF RETAIL PRICES IN CANADA AND AUSTRALIA, 1900-1912.

Number of articles, 19.

Prices in 1900=100.

	1900	1905	1910	1911	1912
Canada.....	100.0	109.9	132.4	142.9	140.6
Australia.....	100.0	100.4	110.2	112.0	118.8

The Australian index number, it will be seen, has gone up less rapidly than the Canadian, having reached in 1912 a point only 18.8 per cent higher than in 1900, whereas the same prices in Canada have gone up 40.6 per cent.

Of the 19 commodities thus compared 15 were up more in 1912 in the case of Canada than of Australia. The rise in the general Canadian index number as compared with the Australian is largely due to the rapid increase of meats in this country compared with the general steadiness or declines in Australia. The only important articles which went up faster in Australia than in Canada were sugar, rice, potatoes and oatmeal.

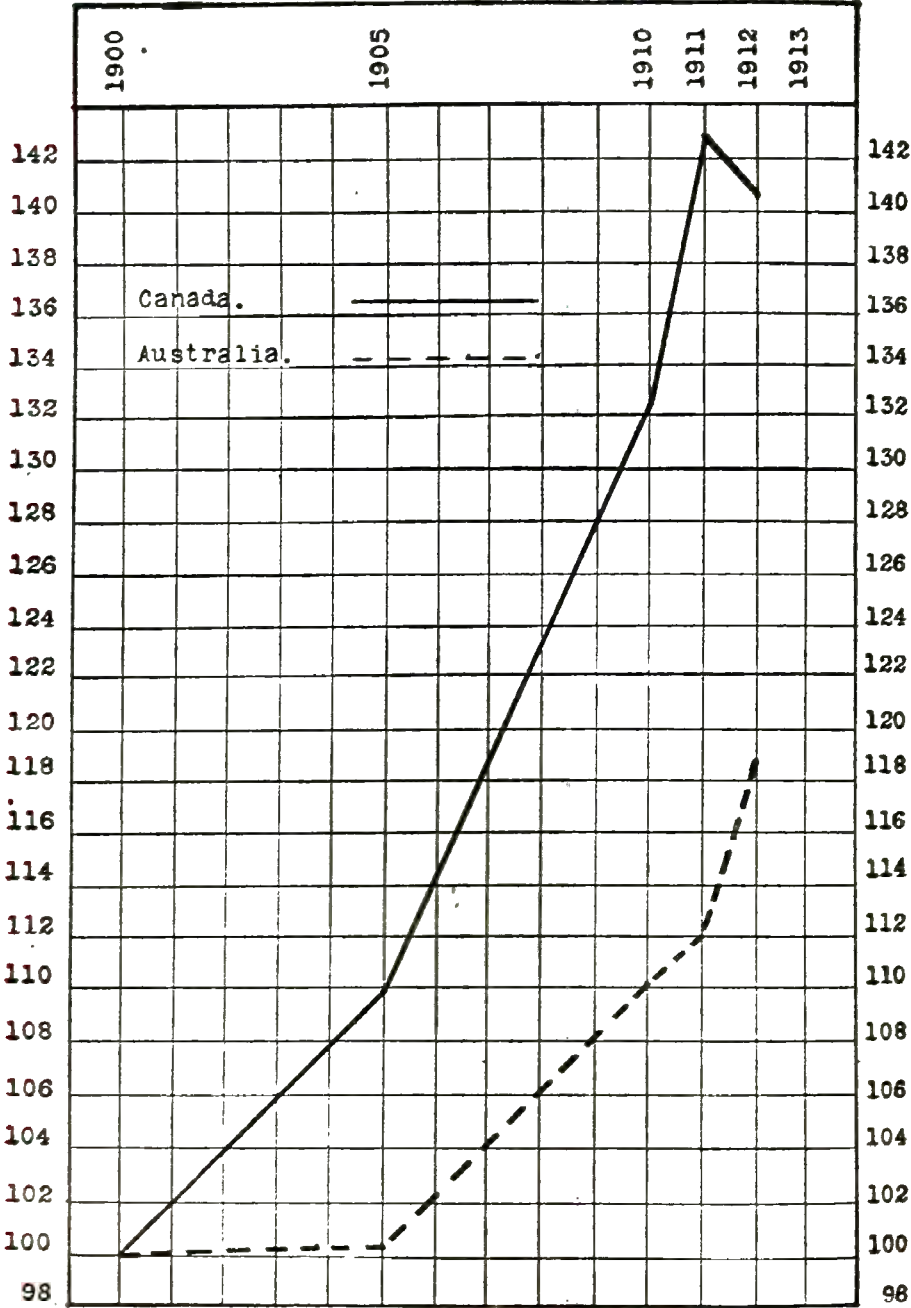
<sup>1</sup> The 19 articles with the weights assigned to each are as follows: beef, sirloin, 4; beef, roasting, 3; mutton, 2; pork, fresh, 2; bacon, 3; butter, 10; cheese, 4; milk, 6; eggs, 7; bread, 6; flour, 4; potatoes, 6; rice, 1; oatmeal, 3; starch,  $\frac{1}{2}$ ; sugar, 4; tea, 2; coffee, 1; kerosene, 2.

The Australian statistics begin with the year 1901 and this year is accordingly made the base though the corresponding Canadian base is 1900. As the Canadian prices were taken in December any inaccuracy arising from this method will probably not be material. The Australian prices were taken four times a year namely, February, May, July and October (*Prices, Price Indexes, and Cost of Living in Australia*, Report No. 1, of the Commonwealth Bureau of Statistics, page 25).

RETAIL PRICES IN CANADA AND AUSTRALIA, 1900-1913.

Number of Articles, 19 (weighted).

Prices in 1900=100.





## COMPARISON OF PRESENT PRICES IN CANADA AND AUSTRALIA.

To throw light on recent actual prices in Canada and Australia two tables are given:

The first shows the average prices of nineteen commodities in six cities in Australia and in fifty-six cities in Canada in 1912. In addition, a weekly budget has been worked out in terms of the Australian and Canadian prices respectively. The table indicates that ten of the nineteen commodities stood at a higher price in Canada in 1912 than in Australia; meat products, (except bacon), flour, bread and sugar were much higher in Canada; on the other hand cheese, milk, potatoes, oatmeal and kerosene were considerably higher in Australia. The budget works out about 2·3 per cent higher for Canada than for Australia.

The second table gives a comparison on the same basis as between Melbourne and Montreal in 1912. Twelve of the nineteen commodities were higher in price in Montreal than in Melbourne. The budget works out 7· per cent higher for Montreal than for Melbourne:

## BUDGET AT RETAIL PRICES IN CANADA\* AND AUSTRALIA.\*\*

	Quantity consumed per week.	PRICE PER UNIT.			COST PER WEEK.	
		Australia.		Canada.	Australia.	Canada.
		s. d.	cts.	cts.	cts.	cts.
Beef—Sirloin..... lb.	2 lb.	6·2	12·4	20·8	24·8	41·6
Beef (shoulder steak in Australia, and shoulder roast in Canada).... lb.	2 lb.	5·0	10·0	14·0	20·0	28·0
Leg of mutton..... lb.	1 lb.	4·7	9·4	17·8	9·4	17·8
Fresh pork..... lb.	2 lb.	7·4	14·8	17·5	29·6	35·0
Bacon..... lb.	1 lb.	11·6	23·2	22·5	23·2	22·5
Butter..... lb.	3 lb.	1 3·6	31·6	31·7	94·8	95·1
Cheese..... lb.	2 lb.	11·6	23·2	20·1	46·4	40·2
Milk..... qt.	6 qt.	5·1	10·2	8·3	61·2	49·8
Eggs..... doz.	6 doz.	1 5·7	35·9	34·3	71·8	68·6
Bread..... lb.	15 lb.	1·65	3·3	4·0	49·5	60·0
Flour..... lb.	10 lb.	1·35	2·7	3·4	27·0	34·0
Potatoes..... pk.	2 pk.	1 8·8	42·1	36·2	84·2	72·4
Rice..... lb.	2 lb.	2·9	5·8	5·8	11·6	11·6
Oatmeal..... lb.	5 lb.	2·9	5·8	4·4	29·0	22·0
Starch..... lb.	$\frac{1}{3}$ lb.	5·6	11·2	9·6	3·7	3·2
Sugar..... lb.	6 lb.	2·9	5·8	6·5	34·8	39·0
Tea..... lb.	$\frac{1}{2}$ lb.	1 3·8	32·0	35·6	16·0	17·8
Coffee..... lb.	$\frac{1}{4}$ lb.	1 6·5	37·5	37·9	9·4	9·5
Kerosene..... gal.	1 gal.	1 1·4	27·2	21·0	27·2	21·0
					\$6·74	\$6·89

\*Unweighted average for 56 cities.

\*\*Weighted average for six metropolitan cities, 1912.

## BUDGET AT RETAIL PRICES IN MELBOURNE AND MONTREAL IN 1912.

	Quantity consumed per week.	PRICE PER UNIT.			COST PER WEEK.	
		Australia. s. d. cts.		Canada. cts.	Australia. cts.	Canada. cts.
Beef, sirloin..... lb.	2 lb.	6 4	12 8	19 8	25 6	39 6
Beef, (shoulder steak in Melbourne and shoulder roast in Montreal). lb.	2 lb.	4 6	9 2	12 4	18 4	24 8
Mutton, leg of..... lb.	1 lb.	4 3	8 6	16 0	8 6	16 0
Pork, fresh..... lb.	2 lb.	6 7	13 4	15 2	26 8	30 4
Bacon..... lb.	1 lb.	10 2	24 7	22 5	24 7	22 5
Butter..... lb.	3 lb.	13 7	31 8	33 3	95 4	99 9
Cheese..... lb.	2 lb.	11 4	23 1	21 0	46 2	42 0
Milk..... qt.	6 qt.	4 6	9 2	8 7	55 2	52 2
Eggs..... doz.	2 doz.	15 4	35 3	41 5	70 6	83 0
Bread..... lb.	15 lb.	1 5	3 0	4 0	45 0	60 0
Flour..... lb.	10 lb.	1 24	2 48	4 1	24 8	41 0
Potatoes..... pk.	2 pk.	15 25	35 0	27 3	70 0	54 6
Rice..... lb.	2 lb.	2 8	5 6	7 0	11 2	14 0
Oatmeal..... lb.	5 lb.	2 8	5 6	4 0	28 0	20 0
Starch..... lb.	$\frac{1}{2}$ lb.	5 3	10 6	7 4	3 5	2 5
Sugar..... lb.	6 lb.	2 9	5 8	5 9	34 8	35 4
Tea..... lb.	$\frac{1}{2}$ lb.	12 7	29 8	37 1	14 9	18 5
Coffee..... lb.	$\frac{1}{2}$ lb.	16 6	37 7	40 0	9 4	10 0
Kerosene..... gal.	1 gal.	10 3	24 9	21 6	24 9	21 6
					\$6 38	\$6 88

## NEW ZEALAND.

(1) A report entitled "The Course of Prices in New Zealand," by James W. McIlraith, LL.B., Litt. D., covering the movement of wholesale prices back to 1861, was issued at the close of 1911 by the Government Printing Office of New Zealand.<sup>1</sup> The following table from the report shows the chief features of the movement by groups of commodities since 1890.

<sup>1</sup> See also article by Dr. McIlraith. *Price Variations in New Zealand*, *Economic Review*, Sept., 1913.

## NEW ZEALAND WHOLESALE INDEX NUMBERS.

(Dr. McIlraith).

Year.	Agri- cultural products, (1)	Pastoral products. (2)	Bever- ages. (3)	Oils. (4)	Mineral- als. (5)	Material- ials. (6)	Other food- stuffs. (7)	Liquors (8)	Total index num- bers.
1890.....	110.3	92.5	100.0	109.6	101.1	121.9	120.0	100.9	106.0
1891.....	119.1	90.3	101.4	104.5	99.2	123.9	122.9	100.9	107.0
1892.....	125.8	89.9	104.1	92.7	95.1	119.5	107.9	100.9	102.9
1893.....	110.8	92.4	104.1	85.8	87.5	113.1	103.2	100.9	99.1
1894.....	104.6	92.4	104.1	88.3	83.8	112.6	97.3	100.7	98.1
1895.....	101.9	83.2	104.1	86.4	80.9	109.2	90.3	100.9	92.1
1896.....	124.6	82.7	100.0	89.9	80.2	109.1	91.1	102.9	95.1
1897.....	142.3	77.5	100.0	98.1	78.8	111.1	94.0	102.7	96.1
1898.....	147.5	79.6	100.0	90.5	78.9	105.2	96.7	102.7	96.1
1899.....	97.4	101.8	100.0	91.5	87.7	99.2	98.1	102.3	98.1
1900.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	97.4	98.7	100.0	101.9	93.2	98.8	97.1	100.0	98.1
1902.....	135.6	104.5	100.0	98.5	85.1	98.5	89.4	100.5	99.1
1903.....	130.6	112.9	99.7	92.1	83.6	97.0	83.1	100.5	99.1
1904.....	104.6	110.9	99.7	81.9	81.2	92.6	82.6	100.9	94.1
1905.....	118.7	115.6	99.7	80.9	83.1	92.3	84.9	100.5	98.1
1906.....	125.3	116.8	99.7	88.6	91.1	92.6	90.0	100.7	100.1
1907.....	144.9	114.1	99.7	95.3	97.3	99.2	98.5	100.9	106.0
1908.....	159.2	118.5	95.6	86.1	90.6	100.0	80.4	102.9	102.9
1909.....	124.6	116.4	109.2	85.1	86.2	101.2	80.3	105.3	100.0
1910.....	131.8	118.9	109.2	100.7	83.4	99.9	84.7	105.3	102.1
1911.....									

(1) Wheat, flour, barley, oats, oatmeal.

(2) Wool, beef, mutton, lamb, bacon, butter, cheese.

(3) Tea, coffee, cocoa.

(4) Kerosene, linseed oil, castor oil.

(5) Iron galvanized, iron bar, lead sheet, zinc, wire No. 8, coal.

(6) Cement, soap, matches, candles, hops, soda-carbonate, soda crystal.

(7) Sugar, currants, raisins, rice, sago, salt, salmon, pepper.

(8) Beer, whiskey, port, claret, brandy.

The following notes may be added:—

"The Decade 1890-99.—In 1889, a somewhat abrupt rise took place, agricultural and pastoral products being the most affected; but the rise was not maintained, and in 1893-4-5, the fall was very sharp, and affected every group. Here we probably were influenced by the Australian bank crisis of 1893-4-5. Prices touched their lowest in 1895; but, though there was somewhat of a financial crisis about this time, the era of the public soup-kitchen had passed away. The Government had successfully initiated the land-for-settlement scheme, the exports of wool and meat gradually increased, while the export of gold again began to advance rapidly. Towards the close of the decade the dairying industry revealed to the New Zealand farmer another hitherto neglected source of wealth. The Government fostered the industry, and in 1899 the export of butter rose 45 per cent, and in 1900 that of cheese 50 per cent on the exports of the previous year.

"The Period 1900-08.—The present century, therefore, has been characterized by greatly increased exports of wool, meat, butter and cheese; while the production of hemp and coal has also risen rapidly. In short, a total foreign trade of £18,000,000 in 1897 has given place to one of £39,000,000 in 1910. Land, as will be pointed out in a later chapter, has risen rapidly in price, and during 1906-7-8 boom prices were realized. The Arbitration Court was also very frequently invoked to raise wages. The old-age pension was raised in 1905 from £18 to £26 per annum. Everything pointed to a period of greatly increased prosperity. With rising wages, and an alleged dearth of unskilled

labour, there was, as in the "seventies," a demand for organized immigration, and during the past few years several thousands of immigrants have arrived in the Dominion. Towards the end of 1908, the financial stringency which affected America and Europe in 1907 and 1908 began to make its influence felt in New Zealand. The price-level fell, credit was restricted, and the rate of interest rose. For a time the "unemployed" difficulty was somewhat acute. A fairly large number left the Dominion, principally for Australia. The stringency now appears to be passing away, but, in view of the great amount of land recently sold at highly inflated prices, the future is looked forward to with some apprehension."<sup>1</sup>

Owing to the limited number of articles included in the New Zealand groups and the difference in the commodities themselves comparisons can be made of only four groups with the corresponding Canadian group figures. The first New Zealand group, agricultural products, has fluctuated considerably throughout, but there can be no doubt that previous to 1910 the Canadian grains and fodder group rose the higher. Pastoral products (including meat products, butter<sup>2</sup> and cheese) did not go up nearly as rapidly (in 1910 118.9) as the Canadian animals and meat group (in 1910 158.2) and dairy products (in 1910 124.4). Beverages in Australia only showed an advance in 1910 of 9.2 points over 1900, while the corresponding rise in the Canadian group on

<sup>1</sup> Dr. McIlraith has kindly furnished the subjoined data supplementary to that of the report for 1911. The base in every case is the annual average for the decade 1890-1899, so that the numbers are not continuous with those in the table on page 273 the information not being available to cover them.

Year.	All commodities.	Farm products.	Non-farm.	Marriage rate.	Bankruptcy rate.
1910.....	109	126	104	129	60
1911.....	112	126	108	135	52
1912.....	117	133	111	137	46
1913.....	117	134	110		

Year.	All products.	Vegetable products. (inc. cereals)	Meats.	Other animal products.	All animal.	All foods.
1913.						
1st quarter.....	119	124	142	149	146	117
2nd quarter.....	119	122	148	148	148	116
3rd quarter.....	117	117	148	145	145	113
4th quarter.....	115	115	149	136	141	109
Whole year, 1913.....	117	120	147	144	145	114
1912.....	117	125	137	142	140	119

NOTE.—(1) General prices stationary on the whole, but quarter by quarter declining. (2) The extraordinary rise in animal products. (3) The late decline in all animal products except meat. (4) The decline in food as a whole.

<sup>2</sup> Butter went up the faster in New Zealand, being 145.3, 167.3 and 165.3 in 1908, 1909 and 1910, respectively, against the corresponding Canadian numbers, 131.0, 114.9 and 120.8.

tea, coffee and chocolate was 23·2 points. Minerals up to 1910 were low in both countries. The total New Zealand index number on the 1900 base was only 102·1 in 1910 against a total Canadian index number of 114·7.

(2) In May, 1912, a Royal Commission was appointed in New Zealand for the purpose of inquiring, amongst other things, into the rise in the cost of living in the past twenty years. Some interesting analyses of the McIlraith statistics were made by the Commission.<sup>1</sup> For example, the chief foodstuffs (17 in number) of the McIlraith investigation were examined separately; they show a rise of approximately 16 per cent since 1900. A corresponding list of articles at wholesale in Canada shows a rise of 28 per cent.

A further analysis by Prof. H. W. Segor, of University College, Auckland, shows the following results:—

#### INCREASE IN FOOD PRICES IN NEW ZEALAND BETWEEN 1894-96 AND 1908-10.

(1894-96=100).

	1894-96.	1908-10.
Breadstuffs (including wheat, flour, barley, rice, sago, oatmeal).....	100	114
Meat and Fish (beef, mutton, lamb, and salmon).....	100	115
Butter and Cheese.....	100	149
Weighted according to relative importance.....	100	121

This shows an increase in the cost of living, as measured by changes in these important foodstuffs, of 21 per cent, during the 17 years covered by the table, and "in the opinion of the Commission affords the most satisfactory estimate."

A further analysis of retail prices in Auckland shows an increase of 24·6 per cent, as between 1894-6 and 1908-10, while a similar estimate for Christchurch shows an increase of about 21 per cent. At Wellington, a rise of 30 per cent in foodstuffs is shown. The final conclusion of the Commission is that prices went up about 16 per cent, in the fifteen years preceding 1910.

The tables exhibited by the Commission follow:

#### ESTIMATE OF INCREASE IN COST OF LIVING IN AUCKLAND, FROM 1894-96 TO 1908-10.

(Weekly Average).

	1894-96	1908-10
	£ s. d.	£ s. d.
Rent.....	0 7 11½	0 12 0
Bread.....	0 1 9½	0 2 2½
Meat.....	0 3 11	0 4 7½
Vegetables.....	0 1 1½	0 2 5½
Milk.....	0 2 0½	0 2 4½
Butter and cheese.....	0 2 0½	0 2 8½
Sugar.....	0 1 0½	0 1 0½
Tea and Coffee.....	0 1 3	0 1 1
Sundry other foods.....	0 3 6½	0 3 8
Clothing.....	0 6 10	0 8 2½
Fuel and Light.....	0 3 0	0 3 1
Groceries other than food.....	0 2 1	0 2 2
Total.....	1 16 7½	2 5 7½
Miscellaneous.....		0 13 5½
Total with miscellaneous.....		2 19 1
An increase (excluding miscellaneous items) of 24·6 per cent.		

<sup>1</sup> *Cost of Living in New Zealand.*—Report of the Royal Commission, 1912.



(FOOD AND RENT ONLY).

(Annual Average).

	Prices 1894-95.	Weights.	Hypo- thetical Expendi- ture 1894-95.	Prices. 1910-11.	Expendi- ture of same scale 1910-11.
	s. d.		£ s. d.	s. d.	£ s. d.
Rent.....		60	60 0 0	20% in- crease.	72 0 0
Bread.....	0 4½ lb.	11	11 0 0	0 6	14 13 4
Meat.....	0 3½ lb.	23	23 0 0	0 4½	33 4 3
Potatoes (vegetables).....	2 3 cwt.	6	6 0 0	8 9	11 11 5
Milk.....	0 3 qt.	12	12 0 0	0 3	3 0 0
Butter, Cheese (in ratio) { Butter : Cheese }.....	0 7 lb. } { 4 : 1 }	14	14 0 0	{ 0 11½ } { 0 10½ }	22 9 11
Sugar.....	0 3 lb.	5	5 0 0	0 2½	3 15 0
Tea and Coffee (in ratio Tea : Coffee : 3:1).....	1 9 lb.	5	5 0 0	1 1½	3 15 0
			136 0 0	.....	164 8 11

An increase of 20%.

INDEX NUMBERS OF WELLINGTON RETAIL FOOD PRICES BETWEEN 1893-95 AND 1908-1910.

	1893-95	1908-10.
Bread.....	100	113
Flour.....	100	116
Beef.....	100	125
Mutton.....	100	138
Cheese.....	100	122
Butter.....	100	127
Potatoes.....	100	166
All.....	100	130
Rent (for same style of house).....	100	114
Rent (for improved style of house, including tram fares).....	100	130-135

ESTIMATED INCREASE IN THE COST OF LIVING IN NEW ZEALAND BETWEEN  
1894-98 AND 1911.

SUMMARIZED FROM EVIDENCE TENDERED TO THE COMMISSION.

(Average weighted according to present relative consumption as shown in Labour Department  
Enquiry, 1910-1911).

	1894-98*	1911
Bread.....	100	122
Butter and Cheese.....	100	149
Boots and Clothing.....	100	119
Sundry Foods.....	100	104
Fuel and Light.....	100	97
Meat.....	100	125
Milk.....	100	100
Vegetables-(omitting potatoes).....	100	100
Rent.....	100	120
Sugar.....	100	88
Tea, Coffee and Cocoa.....	100	100
All (weighted).....	100	116

\*Some of the prices accepted are for years outside the quinquennial period.

*Direct Comparison of Recent Price Tendencies in Canada and New Zealand.*

*Wholesale Prices.*—The official statistics of Canada and New Zealand enable direct comparisons of the wholesale price trend to be made in the case of thirty-seven articles.<sup>1</sup>

## TREND OF WHOLESALE PRICES IN CANADA AND NEW ZEALAND, 1900-1913.

	Number of articles 37				Prices in 1900 = 100.		
	1900	1901	1902	1903	1904	1905	1906
Canada.....	100.0	98.3	98.8	98.4	101.2	103.8	103.5
New Zealand.....	100.0	99.1	103.3	102.2	96.0	99.4	99.9
	1907	1908	1909	1910	1911	1912	1913
Canada.....	109.6	108.9	110.2	114.3	115.6	123.3	119.2
New Zealand.....	107.2	106.8	105.6	104.6			

The New Zealand trend it will be observed, was above that of Canada until 1904, since when it has remained below, maintaining on the whole a fairly level course compared with a fairly persistent though not extreme rise in Canada. Of the thirty-seven commodities on which the above comparisons are based, 21 went up in both countries. Among these, 12 went up faster in Canada (namely, bacon, beef, lamb, salmon, oatmeal, coffee, cocoa, tea, salt, coal, matches, whisky); on the other hand, nine had reached a comparatively higher level in New Zealand (namely, barley, oats, wheat, mutton, but-

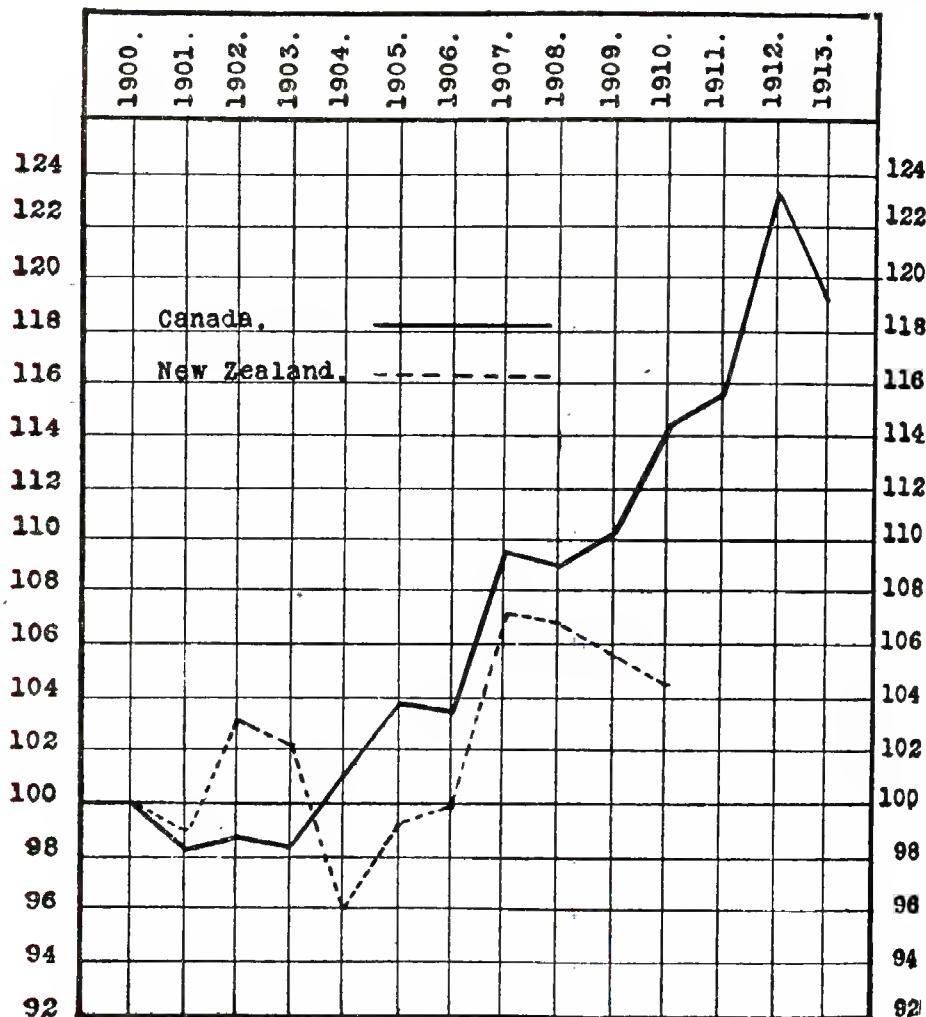
<sup>1</sup>Barley, oats, wheat, bacon, beef, lamb, mutton, butter, cheese, salmon, currants, raisins, flour, oatmeal, rice, coffee, cocoa, tea, sugar, pepper, salt, soda, wool, iron, (galvanized), iron (bar), lead, spelter, (zinc) coal, coal-oil, matches, cement, wire, linseed oil, hops, whisky, ale, soap.

ter, wool, linseed, oil, ale, soap). Nine articles in the list went down in both countries, the following having sagged to a greater extent in Canada than in New Zealand; raisins, iron (galvanized), cement and wire, whereas the following had gone down more in New Zealand than in Canada: currants, pepper, spelter (zinc), coal-oil and iron bar. In the case of the following articles, prices went up in one country and down in the other: cheese, flour, rice, sugar, soda, lead, hops.

# WHOLESALE PRICES IN CANADA AND NEW ZEALAND, 1900-1913.

Number of Articles, 37.

Prices in 1900=100.



There are no comprehensive data for retail prices in New Zealand comparable with the similar figures for Canada,<sup>1</sup> but as already stated, an analysis was made by the New Zealand Cost of Living Commission of the trend of seventeen important food-stuffs<sup>2</sup> included in the McLraith wholesale index number. An index number for Canada based on the same commodities was worked out and the two are shown side by side in the following:

## TREND OF WHOLESALE FOOD PRICES IN CANADA AND NEW ZEALAND.

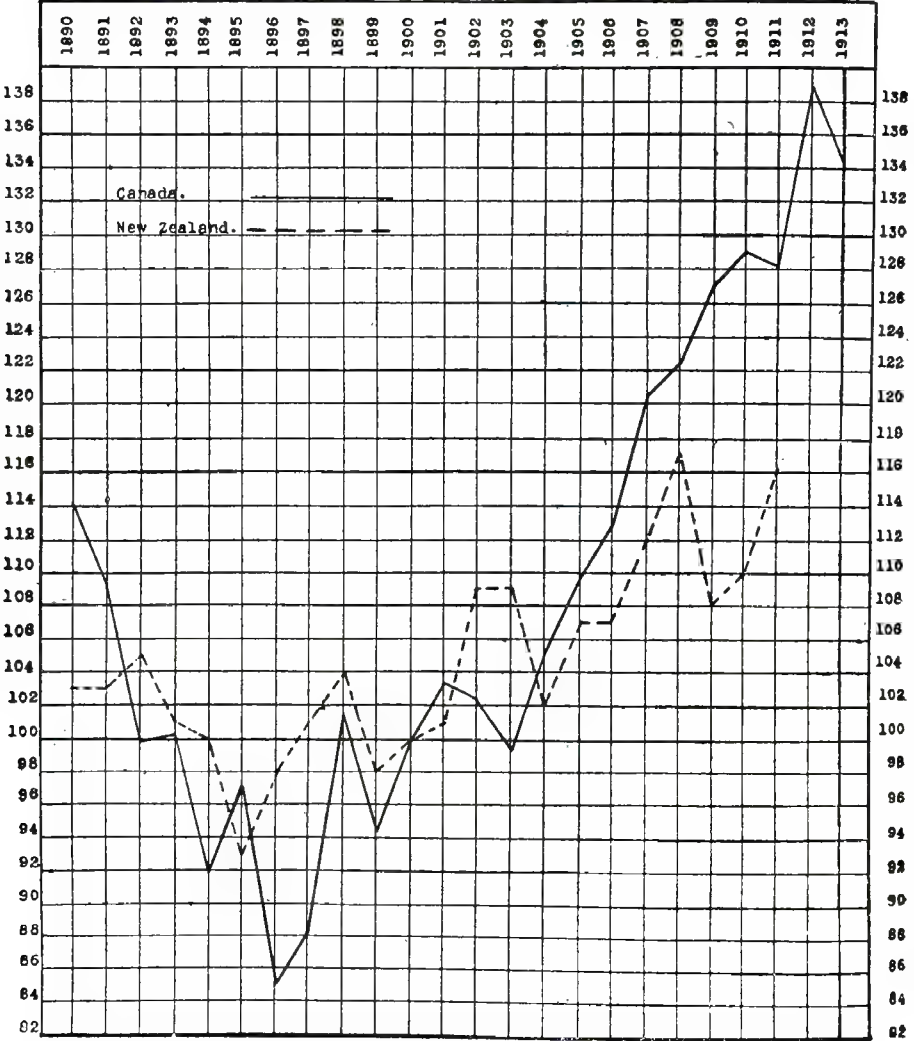
Number of articles 17			Prices in 1900 = 100.		
Year	Canada	New Zealand	Year	Canada	New Zealand
1890.....	114.2	103.0	1902.....	102.4	109.1
1891.....	109.4	103.0	1903.....	99.5	109.1
1892.....	99.9	105.0	1904.....	105.2	102.0
1893.....	100.3	101.0	1905.....	109.8	107.1
1894.....	91.9	100.0	1906.....	110.9	107.1
1895.....	97.1	92.9	1907.....	120.5	112.1
1896.....	83.1	98.0	1908.....	124.4	117.2
1897.....	88.3	101.0	1909.....	127.0	108.1
1898.....	101.5	104.0	1910.....	129.0	110.0
1899.....	94.4	98.0	1911.....	128.1	116.2
1900.....	100.0	100.0	1912.....	138.8	.....
1901.....	103.4	101.0	1913.....	134.3	.....

<sup>1</sup>Table "B" of the appendix shows the New Zealand trend for sugar, vinegar, kerosene, starch and rice, as from the Cost of Living Commission Report p. 22.

<sup>2</sup>Wheat, flour, barley, oats, oatmeal, beef, mutton, lamb, bacon, butter, cheese, tea, sugar, currants, rice, salt and salmon.

WHOLESALE PRICES OF FOODS (17 ARTICLES) IN CANADA AND NEW ZEALAND,  
1890-1913.

Prices in 1900=100.





## RECENT PRICES IN NEW ZEALAND.

The following prices from the New Zealand Year Book, 1913, "compiled from returns furnished by police officers, show the range of average prices of the principal articles of food and drink at the chief centres of population in each Provincial district during the last month of the year 1912" :—

RANGE OF AVERAGE PRICES OF PRODUCE, LIVE-STOCK, PROVISIONS, ETC. IN EACH PROVINCIAL DISTRICT OF NEW ZEALAND DURING DECEMBER \* 1912.

Articles.	Auckland.		Wellington.		Canterbury.	
I. Agricultural produce.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wheat..... per bush. (60 lb.).....	6 6 to	4 6	4 2 to	5 9	3 6 to	4 9
Barley..... " (50 " ).....	4 0 to	5 0	3 6 to	5 0	3 3 to	4 6
Oats..... " (40 " ).....	3 0 to	3 6	2 10 to	3 9	2 0 to	2 9
Maize..... " (56 " ).....	4 8 to	5 6	4 6 to	5 6	4 0 to	4 6
Bran..... " (20 " ).....	1 0 to	2 0	1 3 to	1 9	0 9 to	1 6
Hay, grass, per ton.....	3 0 0 to	4 0 0	3 15 0 to	6 0 0	2 10 0 to	4 10 0
II. Flour and Bread.						
Flour, wholesale, per ton of 2000 lb..	10 0 0 to	11 5 0	9 15 0 to	10 5 0	8 10 0 to	11 0 0
Flour, retail per bag of 50 lb.....	5 4 to	6 9	5 2 to	6 6	5 2 to	6 6
Bread.....	0 7 to	0 8	0 6 to	0 7	0 6 to	0 7
III. Livestock and Meat.						
Cattle, fat, per head.....	7 10 0 to	9 10 0	7 10 0 to	10 0 0	8 0 0 to	14 0 0
Sheep fat, per head.....	15 0 to	1 7 6	14 0 to	1 0 0	16 0 to	1 4 0
Butchers' meat:—						
Beef..... per lb.....	0 4½ to	0 7	0 4½ to	0 6	0 4 to	0 8
Mutton..... " .....	0 5 to	0 6	0 4½ to	0 5	0 4 to	0 6
Veal..... " .....	0 5 to	0 6	0 4 to	0 6	0 4 to	0 6
Pork..... " .....	0 6 to	0 9	0 6 to	0 8	0 6 to	0 8
Lamb..... " .....	0 5½ to	0 8	0 6 to	0 8	0 5 to	0 7
IV. Dairy Produce.						
Butter, fresh, factory, per lb.....	1 2 to	1 3	1 1 to	1 2	1 2 to	1 3
Butter, salt..... " .....	0 10 to	1 0	0 8 to	1 2	0 9 to	1 0
Cheese, colonial..... " .....	0 8 to	0 9	0 7½ to	0 9	0 8 to	0 9
Cheese, imported..... " .....	0 11 to	2 3	2 0 to	3 6	1 2 to	1 10
Milk..... per qt.....	0 3 to	0 4	0 3 to	0 4	0 3 to	0 4
V. Farm-yard Produce.						
Fowls, per pair.....	4 0 to	5 0	3 0 to	5 0	3 0 to	6 0
Turkeys, per head.....	8 0 to	10 0	5 0 to	10 6	8 0 to	11 0
Bacon, per lb.....	0 9½ to	1 0	0 9½ to	1 0	0 8 to	1 0
Ham, per lb.....	0 9½ to	1 0	0 9½ to	1 0	0 9 to	1 0
Eggs, per doz.....	0 11 to	1 3	1 0 to	1 4	0 11 to	1 3
VI. Garden Produce.						
Potatoes (old) wholesale, per ton...	6 10 0 to	12 0 0	4 0 0 to	8 0 0	6 0 0 to	8 0 0
Potatoes (old) retail, per cwt.....	7 0 to	13 0	6 0 to	9 0	8 0 to	11 0
Onions, per lb.....	0 1¼ to	0 2½	0 1 to	0 3	0 2 to	0 4
VII. Miscellaneous Articles.						
Tea, per lb.....	1 0 to	1 9	1 6 to	2 0	1 6 to	1 10
Coffee, per lb.....	1 3 to	1 9	1 8 to	1 10	1 6 to	2 0
Sugar, per lb.....	0 2½ to	0 3	0 2 to	0 3	0 2½ to	0 3
Rice, per lb.....	0 2 to	0 3	0 2 to	0 3	0 2 to	0 2½
Soap, per cwt.....	12 6 to	1 18 0	11 0 to	1 2 0	1 2 0 to	1 8 0
Tobacco, per lb.....	5 6 to	7 6	5 6 to	6 6	5 3 to	8 0
Coal, per ton.....	1 3 0 to	1 14 0	1 11 0 to	2 4 0	1 14 0 to	2 6 0
Firewood, per cord.....	10 0 to	2 0 0	1 5 0 to	2 8 0	16 0 to	2 2 0

(3) *South Africa.*

No statistics as to the trend of prices in South Africa are available, but the Economic Commission of 1913, whose report appeared in January, 1914, conducted an investigation into present conditions, certain findings of which are of interest here.

In order to obtain a general idea of the divergencies in local price levels, the Commission (through magistrates and other authorities) secured from retail dealers in a number of places the current highest and lowest prices for certain commodities in general use, namely, sugar, cheese, butter, flour, bread, beef, mutton, tea, coffee, cocoa, bacon, eggs, potatoes, fresh milk, tinned milk, oatmeal, rice and paraffin. The (arithmetic) mean price of each commodity for each place having been calculated, that for Johannesburg in each case was put as 100, while the mean prices at other places were expressed by proportionate numbers, with the following result:—

		Average of eighteen articles general prices	Average of eighteen articles general prices.
Aliwal North.....	93	Durban.....	86
Beaufort West.....	95	Pietermaritzburg.....	89
Cape Town.....	89	Boksburg.....	102
Cradock.....	87	Germiston.....	97
East London.....	98	Johannesburg.....	100
Graaff-Reinet.....	84	Krugersdorp.....	108
Grahamstown.....	88	Pietersburg.....	92
Kimberley.....	102	Potchefstroom.....	88
King Williams Town.....	90	Pretoria.....	100
Mossel Bay.....	89	Bloemfontein.....	91
Oudtshoorn.....	94	Harrismith.....	103
Port Elizabeth.....	87	Jagersfontein.....	103
Queenstown.....	92	Kroonstad.....	107
Uitenhage.....	90		

The report adds: "Numerous causes can be singled out to explain why prices have not the same level throughout the Union. In some cases certain commodities are produced or landed, whereas to other places they have to be carried by rail or road, frequently over long distances, and the cost of transport may become a heavy item in the expense of things inland. Other elements in the explanation of local differences in cost of living arise from the fact that the degree of competition and the perfection of economic organization are not the same everywhere. Where the population is considerable, and the means for furnishing supplies are highly organized under competing agencies, and a large and steady market can be depended upon, a smaller profit per article sold is to be expected, and the cost of distribution must be appreciably lower."

After a somewhat extensive comparison of cost of living in South Africa and elsewhere (a further reference to which appears on page 333 hereunder) the Commission concludes:

"On every basis of calculation the high cost of food in South Africa is outstanding. One noticeable point bearing on this is that South Africa raises only about 50 per cent of the wheat and flour consumed. Meat and mealies figure largely among farm products, but it is the meat only that is consumed to any extent by whites. Mealie meal, although a valuable food, is almost negligible in the white man's budget. It should be remarked also that the high rent of shops and other premises figure to some extent in determining the cost of living. With respect to other things as well as food, the general level of prices is bound to be somewhat high in South Africa in view of the great variety and

volume of imported goods which are brought from great distances, and have therefore to bear a heavy cost of carriage, and in view also of the Customs duties charged upon them."

The final conclusions of the Commission on this point are expressed as follows:—

"(1) Cost of living for whites (food and rents) on the Witwatersrand is about 40 per cent higher than in America (the most expensive of the other countries examined) and nearly 80 per cent higher than in any European country.

"(2) The chief factor in the high cost of living in South Africa is rent, and another factor of some weight is the high standard of living, particularly on the Witwatersrand."

The report contains an appendix in which the average prices in the 27 towns above mentioned are quoted. An excerpt from this table is given below together with comparative budgets as between Montreal and Capetown and Winnipeg and Johannesburg.

#### AVERAGE PRICES IN 7 TOWNS IN THE UNION OF SOUTH AFRICA.

Article.	Quantity	Cape Town	Graaff-Reinet	Kimberly.	Durban	Johannesburg	Pretoria	Kroonstad
		pence	pence	pence	pence	pence	pence	pence
Beef.....	lb.	8.75	6.17	9.00	.....	8.50	8.82	10.00
Mutton.....	"	6.63	4.75	8.50	.....	9.00	8.39	8.00
Tea.....	"	25.00	21.86	29.63	19.10	25.80	24.40	25.50
Coffee.....	"	15.33	8.95	18.68	17.17	24.30	20.12	20.00
Sugar.....	"	2.69	2.61	3.00	2.65	2.94	3.27	2.75
Bacon.....	"	17.25	15.57	18.25	18.10	17.75	19.00	21.00
Eggs.....	doz.	18.60	16.50	19.97	18.69	22.80	21.90	21.00
Cheese.....	lb.	14.45	12.89	15.71	12.90	14.70	15.17	21.00
Butter.....	"	19.88	23.08	20.78	18.88	18.42	19.00	21.00
Potatoes.....	"	2.00	1.89	2.00	1.83	1.63	1.94	2.50
Flour.....	"	2.54	2.53	2.91	2.40	2.92	2.74	3.00
Bread.....	"	2.60	3.00	3.00	2.00	3.00	3.25	3.00
Fresh milk.....	pint	2.88	2.47	4.00	3.00	4.00	.....	2.50
Oatmeal.....	lb.	3.33	5.08	4.99	4.10	4.38	4.18	6.00
Rice.....	"	2.94	2.53	3.39	2.80	3.60	3.57	3.50
Paraffin.....	case 8 gal.	112.00	135.00	153.22	102.21	153.75	155.25	162.00

BUDGET AT RETAIL PRICES—CAPE TOWN AND MONTREAL,  
DECEMBER, 1913.

Commodity.	Quantity consumed per week.	Price per Unit.			Cost per Week.	
		Cape Town Pence.	Cents.	Montreal Cents.	Cape Town Cents.	Montreal Cents.
Beef, lb.....	4 lbs.	8.75	17.50	17.70	70.00	70.80
Mutton, lb.....	1 lb.	6.63	13.26	18.50	13.26	18.50
Tea, lb.....	$\frac{1}{2}$ lb.	25.00	50.00	40.00	25.00	20.00
Coffee, lb.....	$\frac{1}{2}$ lb.	15.33	30.66	35.00	7.66	8.75
Sugar, lb.....	6 lbs.	2.69	5.38	5.00	32.28	30.00
Bacon, lb.....	1 lb.	17.25	34.50	24.00	34.50	24.00
Eggs, doz.....	2 doz.	18.60	37.20	56.50	74.40	113.00
Cheese, lb.....	2 lbs.	14.45	28.90	19.00	57.80	38.00
Butter, lb.....	3 lbs.	19.88	39.76	30.50	119.28	91.50
Potatoes, pk.....	2 pks.	30.00	60.00	16.66	120.00	33.32
Flour, lb.....	10 lbs.	2.54	5.08	3.50	50.80	35.00
Bread, lb.....	15 lbs.	2.60	5.20	4.70	78.00	70.50
Fresh milk, qt.....	6 qts.	5.76	11.52	10.00	69.12	60.00
Oatmeal, lb.....	5 lbs.	33.3	6.66	5.00	33.30	25.00
					\$7.85	\$6.38

## BUDGET AT RETAIL PRICES, JOHANNESBURG AND WINNIPEG, 1913

Commodity	Quantity consumed per week.	Price per Unit.			Cost per Week.	
		Johannes- burg. Pence.	Cents.	Winnipeg Cents.	Johannes- burg. Cents.	Winnipeg Cents.
Beef, lb.....	4 lbs.	8.50	17.00	20.50	68.00	82.00
Mutton, lb.....	1 lb.	9.00	18.00	24.00	18.00	24.00
Tea, lb.....	$\frac{1}{2}$ lb.	25.80	51.60	35.00	25.80	17.50
Coffee, lb.....	$\frac{1}{2}$ lb.	24.30	48.60	40.00	12.15	10.00
Sugar, lb.....	6 lbs.	2.94	5.88	6.60	35.28	39.60
Bacon, lb.....	1 lb.	17.75	35.50	35.00	35.50	35.00
Eggs, doz.....	2 doz.	22.80	45.60	40.00	91.20	80.00
Cheese, lb.....	2 lbs.	14.70	29.40	21.50	58.80	43.00
Butter, lb.....	3 lbs.	18.42	36.84	32.50	110.52	97.50
Potatoes, pk.....	2 pks.	24.45	48.90	16.66	97.80	33.32
Flour, lb.....	10 lbs.	2.92	5.84	3.50	58.40	35.00
Bread, lb.....	15 lbs.	3.00	6.00	5.00	90.00	75.00
Milk, qt.....	6 qts.	8.00	16.00	10.00	96.00	60.00
Oatmeal, lb.....	5 lbs.	4.38	8.76	5.00	43.80	25.00
					\$8.41	\$6.57

## (4) India.

The Commercial Intelligence Department of the Indian Government issues four index numbers of prices, based on statistics covering 39 articles, including metals, coal, textiles, grain, hides, sugar and chemicals. These articles have risen 18.1 per cent since 1900, or 25 per cent since 1896. The import articles of the list (11 in number) show a rise of 22.1 per cent since 1900, while the articles exported and consumed (28 in number) show a rise of 17 per cent. A special index number of the retail prices of 7

food grains shows a level much the same in 1912 as in 1900. Mr. Atkinson's index number of silver prices (weighted) shows a rise of 22.1 per cent since 1900, or 34 per cent since 1896.

THE COURSE OF PRICES IN INDIA, 1890-1912—INDEX NUMBERS OF PRICES.

Year.	Special Index Number for Food-grains (1) (retail prices.)	Special Index Number for imported articles (2.)	Special Index Number for articles exported and consumed (3).	General Index Number for the whole of the selected articles.	Atkinson's Index Number for silver prices (4).
1890.....	63.0	94.8	83.9	86.3	82.6
1891.....	71.4	87.5	83.1	84.5	83.9
1892.....	77.1	87.5	87.9	88.0	92.4
1893.....	67.2	93.0	90.4	90.6	90.3
1894.....	59.4	87.5	88.7	87.9	86.1
1895.....	62.5	90.7	89.6	89.6	83.9
1896.....	80.8	98.0	94.4	94.9	91.7
1897.....	108.9	90.0	100.0	97.5	107.7
1898.....	72.2	83.4	82.3	82.8	88.2
1899.....	71.4	90.7	80.7	82.8	84.7
1900.....	100.0	100.0	100.0	100.0	100.0
1901.....	81.8	100.0	93.6	94.9	97.2
1902.....	73.5	98.0	91.2	91.4	89.6
1903.....	65.7	91.7	83.1	85.4	86.1
1904.....	61.0	96.9	83.9	87.1	84.7
1905.....	76.6	100.0	93.6	94.9	93.8
1906.....	93.3	109.4	112.1	111.3	110.5
1907.....	93.8	120.8	116.9	118.2	116.8
1908.....	120.4	110.4	121.8	119.0	125.9
1909.....	101.6	103.1	107.3	106.9	112.6
1910.....	87.5	113.5	102.5	105.2	105.6
1911.....	83.9	117.7	109.7	111.3	109.1
1912.....	98.5	121.8	116.9	118.2	122.4

(1) Rice, wheat, jawar, bajra, gram, barley and ragi.

(2) Iron, copper, spelter, grey shirting, grey yarn, coloured yarn, sugar Mauritius, silk raw, coal, kerosene oil, salt.

(3) Wheat, rice, jawar, bajra, gram, barley, ragi, tea, sugar, ghi, hides raw, cotton raw, jute raw, silk raw, saltpetre, wool raw, castor oil, linseed, rapeseed, sesamum, poppy seed, coal, cotton yarn, cloth, jute, (gunny-bags), skins dressed, lac shell, indigo.

(4) "The ratios for the different articles selected were weighted by Mr. Atkinson with reference to a standard of consumption. The weights are so arranged that 60 out of 100 are on articles of food (30 representing rice alone), 29 on raw produce and materials, and 11 on manufactures. Mr. Atkinson has discontinued his series since 1900."—*Variations in Indian Price Levels from 1861 to 1912*, p. 2. *Commercial Intelligence Department, India.*

The course of prices in India since 1900 is thus described in a report on *Prices and Wages in India*, compiled in the office of the Director-General of Commercial Intelligence, 1913:

"1901-05.—There was no very marked return to ordinary price levels in 1901 and 1902 as the weather conditions were generally not favourable, except, perhaps, for rice. But in the next two years, and particularly in 1904, agricultural conditions were distinctly good, especially in the case of the wheat crop. There was in these two years a corresponding improvement in prices of food grains, especially of rice and wheat; but a set-back was experienced in 1905. The seasonal conditions of that year were marred by a partial failure of the monsoon in Northern and Western India and by heavy rain and floods in Bengal and Eastern Bengal. A sharp and rapid rise in the prices of articles of Indian produce, especially food-grains, began in 1905.

"1906-10.—The rise was sustained in 1906 as the spring crops of that year, except wheat, were generally not good, and the autumn crops were damaged more or less by excessive rain and floods, particularly in Bengal and Eastern Bengal. Agricultural



prospects were to a certain extent improved by the good winter rains which, though late, saved a part of the spring harvest of 1907 in Northern India. But as unfavourable conditions prevailed in other parts of the country, particularly in Bengal, prices remained unaffected; and when the failure of the southwest monsoon occurred, famine conditions declared themselves over a large area. The wheat and oil-seeds harvests of 1908 were very poor owing to deficient and badly distributed rainfall. Neither were the autumn crops good. The rise of prices was accentuated in 1907 and 1908 by the widespread failure of the crops in Northern India. The wheat crop of 1909 showed an advance on the previous year, though the winter rains were generally deficient and the untimely rain in April damaged a quantity of the grain on the threshing floor in parts where the crop was reaped early. The monsoon was exceptionally favourable, and there was a considerable increase in the total out-turn of the staple crops. There was a phenomenal rice crop in Burma and the two Bengals, the extended cultivation in the latter having been stimulated by low prices of jute. As a result there was a general decline in prices in 1909. The timely and well distributed winter rains brought fine crops to harvest in the spring of 1910. The monsoon of that year was on the whole favourable and the crops good. Prices continued to fall; but in the case of rice a strong demand from China operated to keep the rates at the level of the previous year, particularly in Burma.

"1911-12.—The spring crops of 1911 were on the whole good, though frost and rust affected them in parts of Northern and Western India and prices continued to fall. The monsoon of that year, however, was not very favourable, particularly in Northern and Western India where the autumn crops suffered more or less from drought, and prices of rice showed an upward tendency accentuated by strong export demand. The spring crops of 1912 suffered through drought in Western and in parts of Northern India and prices rose; and although the monsoon of that year was not on the whole unfavourable, the strong export demand maintained the prices of rice at a high level."

*Direct Comparison of Recent Price Tendencies in Canada and India.*

The official statistics of wholesale prices in India and Canada include twenty commodities common to both. No animal or meat products, fish, dairy products or building materials are represented in this list, the comparison being limited to grains, textiles, hides, metals and coal. The following table contains the comparative index numbers for these:

Trend of wholesale prices in India and Canada, 1900-1913.

Number of Commodities, 20.\* Prices 1900=100.

—	1900	1901	1902	1903	1904	1905	1906
Canada.....	100	98.0	93.1	90.8	92.6	97.0	10.98
India.....	100	98.1	95.6	99.0	101.5	104.9	110.0
	1907	1908	1909	1910	1911	1912	1913
Canada.....	120.0	119.2	110.1	110.4	118.5	120.7	.....
India.....	112.3	104.1	109.3	113.7	117.5	117.4	118.4

\*Namely: Barley, flax, wheat, rice, tea, sugar, salt, wool, cotton raw, silk raw, jute raw, hides, copper, iron, spelter, coal, coal oil, shirting, grey cotton, indigo.

## COURSE OF WHOLESALE PRICES, CANADA AND INDIA, 1900-1913.

Number of Articles Included, 20.

Prices in 1900=100.



The Indian price level of grains, textiles and metals, it will be seen has gone up faster than the corresponding level in Canada. Of the twenty commodities, fourteen show a greater increase during 1900 to 1912 in India than in Canada.

IV. *Other Foreign Countries.*

Statistics of price trends in 1900 in various other foreign countries have been brought together in the accompanying large table, where an explanation will be found in each case of the articles included and the source of the statistics. The countries are dealt with in alphabetical order, both in the table and in the accompanying commentary, as follows: Austria-Hungary, Belgium, Denmark, France, Germany, Holland, Italy, Japan, Norway, Russia.<sup>1</sup>

(1) *Austria-Hungary.*

Four index numbers of prices in the Empire of Austria-Hungary are given. They agree in showing a persistent and material rise in prices.

(1) The *Wholesale Prices* of 45 articles (taken chiefly at Vienna and Budapest) as compiled by Herr Von Jankovitch rose 14.6 per cent between 1900 and 1909.

(2) *Contract Prices* of 13 articles at Trieste went up 45 per cent in 1900-1911. This number reflects the change in the cost of a yearly food supply for a working-class family.<sup>2</sup>

(3) *Retail Prices.* Two index numbers will be found in the table: (a) Statistics of retail prices issued by the municipality of Vienna (as analyzed by the United Kingdom Department of Labour) shows that food and fuel have gone up approximately 35 per cent since 1900, the chief rise having been in bacon (77 per cent); veal (54 per cent); butter (50 per cent); pork and lard (49 per cent); beef (44 per cent); potatoes (40 per cent); and flour (29 per cent). Prior to 1900, prices had been stationary on a low level since about 1884. For 13<sup>3</sup> of the articles included in this investigation, comparative figures for Canada are available; these are brought together in a total (weighted) index number in the following:

<sup>1</sup> The Municipal Statistical Office of Stockholm made in 1907-8 a budgetary study of the cost of living of 150 families with incomes of less than \$1,200 per annum (Stockholm Statistiska kontoret. Statistisk undersökning angående lefnadskostnaderna i Stockholm åren 1907-8. På föranstaltning af Stockholm stadsfullmäktiges lifsmedelskomitté, verkställd af Stockholm stads Statistiska kontor, Stockholm K. L. Beckmans boktryckeri 1910.) The number of families is small but an interesting feature is an account of the expenditures of one family given for a period of about 40 years. Mention may also be made of a volume published by the Swedish Division of Labour Statistics on prices of food and rents in Sweden during the years 1904 to 1907 (Sweden K. Kommerskollegii Afdelning för Arbetsstatistik Lifsmedelsoch Bostadspriser i Sverige under åren 1904-7. Utgifven af K. Kommerskollegii, Afdelning för Arbetsstatistik Stockholm 1909). A digest of the contents of this report is given in Bulletin 84 of the United States Bureau of Labour.

<sup>2</sup> Alberti Mario Il costo della vita i salarie le paghe a Trieste nell, ultimo quarto de secolo Ettore Vram. editore, Trieste Tip. Nouva 1911.

<sup>3</sup> Namely, beef, pork, bacon, veal, lard, milk, butter, bread, flour, sugar, potatoes, coal and petroleum.

THE Course of Prices in Various Foreign Countries, 1890-1913. Index Numbers of Prices, Wholesale and Retail. (Prices in 1900 = 100.)

NOTE.—The countries are arranged alphabetically—Canadian index numbers for purposes of rough comparison will be found on p. 230-233 inc.

Year.	AUSTRIA—HUNGARY.				BELGIUM.		DENMARK.
	Wholesale Prices. (1) 45 articles in various markets Von Jankovich. (Unweighted.)	Contract Prices. (2) 13 articles at Trieste. Signor Alberi. (Weighted.)	Retail Prices. (3) Vienna. 14 articles of food at Vienna. U. K. Dept. of Labour. (Unweighted.)	Retail Prices. (4) Hungary. 60 articles in 22 localities. U. K. Dept. of Labour. (Unweighted.)	Wholesale Prices. (5) 10 articles at Brussels. Waxweiler. (Unweighted.)	Retail Prices. (6) 11 foods in 16 localities. U. K. Dept. of Labour. (Weighted.)	
1890...	93.9	97	100.4	.....	92.8	.....	Import and Export Values. (7) 38 articles Dept. of Statistics of Denmark. (Weighted.)
1891...	95.1	102	101.9	.....	94.6	.....	99.1
1892...	90.2	102	101.5	.....	94.1	.....	101.8
1893...	91.4	98	100.1	.....	87.0	.....	91.8
1894...	87.8	96	100.1	.....	90.8	.....	90.9
1895...	87.8	96	102.6	.....	88.8	.....	85.5
1896...	86.5	92	101.5	.....	88.9	.....	83.6
1897...	87.8	109	101.5	.....	91.9	.....	84.5
1898...	91.4	111	102.2	.....	93.3	.....	86.4
1899...	92.7	104	101.2	.....	94.0	.....	90.0
1900...	100.0	100	100.0	99	100.0	100.0	95.5
1901...	97.5	100	99.6	100	101.4	100.7	100.0
1902...	95.1	104	99.2	101	103.5	101.5	96.4
1903...	97.5	102	101.3	102	103.8	101.7	98.2
1904...	100.0	108	105.4	103	105.3	102.7	95.5
1905...	103.6	116	107.6	111	105.1	108.5	97.3
1906...	110.9	113	112.7	122	105.1	109.5	100.0
1907...	115.8	120	112.9	118	111.7	111.6	103.6
1908...	110.9	124	117.6	128	112.3	114.6	107.3
1909...	114.6	125	119.7	128	116.5	115.8	102.7
1910...	.....	120	125.9	131	114.5	120.0	104.4
1911...	.....	145	127.5	129	112.8	122.0	109.1
1912...	.....	.....	134.8	137	.....	128.0	111.8
1913...	.....	.....	.....	.....	.....	132.3	118.2

## The Course of Prices in Various Foreign Countries, 1890-1913—Continued.

Year.	FRANCE.						GERMANY.												
	Wholesale.						Wholesale.						Retail.						Wholesale and Retail (19) prices of 27 foods at Lubeck. (Unweighted.)
	Import Values. De Foville.	Export Values. De Foville.	Import Values. (8) French Ministry of Labour. (Unweighted.)	Market Prices. (9) 45 articles. French Ministry of Labour. (Unweighted.)	Market Prices. (10) 48 articles. La Reforme Econo- mique. (Unweighted.)	Retail Prices. (11) Cost of food, fuel and lighting at Paris. (Weighted.)	17 articles. (12) Herr Calwer. (Weighted.)	29 articles. (13) Otto Schmitz. (Unweighted.)	39 articles. (14) Vossische Zeitung. (Unweighted.)	12 articles of food in Bavaria. (15) Dr. Zahn. (Weighted.)	Cost of a weekly ration in 7 towns (16) Herr Calwer. (Weighted.)	Food prices in 4 German States. (17) U. K. Dept. of Labour. (Weighted.)	16 foods in Bruns- wick. (18) Von Zimmermann. (Unweighted.)						
1890.	110.4	105.7	101.0		97	108.7		100.9		100.5				111.9	96.4				
1891.	107.8	103.4	99		97	111.4		98.3		100.7				110.6	92.2				
1892.	101.9	101.1	96		92	110.0		89.6		102.1				109.6	99.1				
1893.	100.0	101.1	95		95	105.5		86.5		99.6				109.2	101.8				
1894.	93.5	95.4	87		88	104.7		78.6		102.1				100.4	93.9				
1895.	87.7	95.4	85		82	103.1	86.8	78.4		98.7				98.9	90.6				
1896.	87.0	95.4	83		80	99.6	86.6	78.8		97.0				98.9	91.7				
1897.	85.7	93.1	84		81	98.9	92.4	80.5		98.5				98.8	97.0				
1898.	87.7	93.1	86		86	104.5	97.3	85.1		102.4				101.1	100.7				
1899.	94.1	98.8	94		93	104.7	93.2	92.4		100.7				99.3	96.8				
1900.	100.0	100.0	100		100	100.0	100.0	100.0		100.0				100.0	100.0				
1901.	92.8	96.0	95		94	99.7	97.6	94.0		100.6				101.6	101.3				
1902.	92.2	96.5	96		92	95.3	95.4	93.1		103.3				106	102.9				
1903.	95.4	98.3	95		93	98.0	96.0	94.5		103.0				104.6	101.2				
1904.	94.8	97.7	94		93	98.9	98.9	94.1		104.4				105	101.2				
1905.	96.7	100.0	99		94	96.7	106.6	97.1		110.7				104.7	103.7				
1906.	104.1	104.4	105		103	95.1	106.8	105.2		114.7				113.0	106.9				
1907.	107.1	105.4	110		109	99.9	115.3	112.1		113.8				120.3	111.9				
1908.	99.2	100.9	101		98	102.1	113.1	105.9		115.8				119.8	111.6				
1909.	103.8	104.7	101		100	100.3	113.9	104.8		121.3				124	113.1				
1910.	110.5	108.7	105		105	104.0	111.8	106.7		125.7				127	111.9				
1911.			111		111	116.5	114.9	111.7		125.9				128	113.6				
1912.			115		115	116.0	129.1	122.4		135.5				138.0	122.3				
1913.			113		113	123.2	123.2	122.4		134.7				138.0	*118.6				

\*Wholesale prices of grains and fodder (10) not included.



The Course of Prices in Various Foreign Countries, 1890-1913—Continued.

Year.	HOLLAND.				ITALY.				JAPAN.		NORWAY.			RUSSIA.	
	Wholesale prices of Agricultural products. (20) (Unweighed.)	Retail Prices. (21) U. K. Dept. of Labour.	Dutch Labour Dept.	Food supplies for 5 State Institutions. (22) (Unweighed.)	Foods for Amsterdam hospitals. (23) M. Falkenberg.	Contract Prices.	Import Values. (24) (Unweighed.)	Export Values. (24) (Unweighed.)	Prices of food at 43 State Educational Institutions. (25) our Dept. (Unweighed.)	Prices of food supplied to War office. (26) Italian Labour Dept. (Unweighed.)	Contract Prices.	Retail Prices.	Wholesale Prices.	Wholesale Prices. (34) (Unweighed.)	69 articles. Russian Ministry of Commerce and Industry.
1890.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1891.	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2	105.2
1892.	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1893.	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4
1894.	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0
1895.	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0
1896.	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8
1897.	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
1898.	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0
1899.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1900.	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1901.	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1902.	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4	104.4
1903.	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0	106.0
1904.	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0	112.0
1905.	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8
1906.	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4	117.4
1907.	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0	117.0
1908.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1909.	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1	105.1
1910.	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4	123.4
1911.	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7	134.7
1912.	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9	121.9
1913.	136	136	136	136	136	136	136	136	136	136	136	136	136	136	136

The following notes apply to the reference numbers in the preceding table:—

- (1) Foods, minerals, textiles and miscellaneous; chiefly in Budapest and Vienna. Bulletin of the International Statistical Institute, Vol. XIX, p. 136.
- (2) Bread, flour, macaroni, rice, beans, potatoes, olive oil, cheese, peas, beef, sugar, wine, vinegar and soap. The number reflects changes in the cost of a yearly supply of food for a working class family. U.K. Cd. 6955, p. 328.
- (3) Flour, bread, peas, lentils, potatoes, sauer kraut, milk, sugar, butter, beef, veal, pork, lard and bacon. The original prices statistics are those of the Monthly Bulletin of the Municipality of Vienna. U.K. Cd. 6955, p. 327.
- (4) Grains, breadstuffs, meats, poultry, groceries, forage, beverages, fuel, vegetables, dairy produce, etc. The original prices from Yearbook of Central Statistical Office of Hungary. U.K. Cd. 6955, p. 331.
- (5) Wheat, potatoes, meats, eggs, butter, milk, linen, calico, coal and wood. Bulletin International Statistical Institute. XIX 210.
- (6) Bread, coffee, eggs, butter, beef, pork, bacon, potatoes, sugar, rice and haricots. Original prices collected and published by Belgian Labour Department. U.K. Cd. 6955, p. 336.
- (7) Grouped as follows: Group (1) Tallow, oleo, flour, flaxseed, cocoanut, rice, coffee, cocoa, tobacco, cotton thread, lard, copper, coal oil. Group (2) Horses, eggs, salt herring, wheat, potatoes, flax, linen thread, hides, boots and shoes, paper, wood, bricks. Group (3) Meat, salt pork, butter, rye, wheat, barley, oats, corn, sugar, coal, pig iron, iron bar, oil cake and timber. Group 1 is given a weight of 1, group 2 of 2, group 3 of 3. Bulletin of the International Statistical Institute, XIX, p. 219.
- (8) Wheat, flour, rye, corn, barley, oats, potatoes, rice, cattle, sheep, pigs, salt meat, butter, sugar (3), coffee, cocoa, cheese, pig iron, bar iron, tin, copper, lead, coal (2), cotton, hemp, flax, jute, wool, silk, iron ore, zinc, hides, tallow, oil (3), linseed, petroleum, nitrate of soda, indigo, oak (2). U.K. Cd. 6955, p. 340.
- (9) Wheat, flour, rye, barley, oats, corn, potatoes, rice, beef (2), mutton (2), pork, salt meat, butter, cheese, sugar (2), coffee, cocoa, iron (3), copper tin, lead, zinc, coal, cotton, flax, hemp, jute, wool, silk, hides, tallow, coal oil, linseed, alcohol, soda, nitrates, indigo, wood, rubber. U.K. Cd. 6955, p. 341.
- (10) Under the following main headings: Wheat, meal, wine, sugar, alcohol, coffee, coal, coal oil, copper, tin, zinc, lead, steel, iron, silk, wool, flax, cotton, soda, phosphate, sulphuric acid. U.K. Cd. 6955, p. 342. See also wholesale prices, Canada, 1913, p. 282.
- (11) Consumption of a typical Paris carpenter. Salaires et coût de l'existence à diverses époques jusqu'en 1910. U.K. Cd. 6955, p. 339.
- (12) Wheat, rye, potatoes, rice, pigs, oxen, cows, sheep, coffee, tobacco, sugar, coal, petroleum, pig iron, cotton jute and silk. The original prices have been published by Imperial Statistical Office. U.K. Cd. 6955 p. 353.
- (13) Cereals and other agricultural and fishery products, colonial wares, textiles, metals, fuel and lighting. U.K. Cd. 6955, p. 354.
- (14) Grains, vegetables, meats, textiles, metals, fuel, etc. U.K. Cd. 6955, p. 357.
- (15) Rye bread, rye flour, wheat flour, beef, veal, pork, potatoes, milk, butter, lard, eggs and beer. Original prices from the Journal of the Bavarian Statistical Office. U.K. Cd. 6955, p. 343.
- (16) The weekly ration served to the German blue jacket in home ports. U.K. Cd. 6955, p. 344.
- (17) Bavarian, Wurtemberg, Prussian and Baden. Commodities included: Bread, flour, potatoes, sugar, coffee, butter, eggs, beef, veal, mutton, pork, bacon and milk. U.K. Cd. 6955, p. 347-8.
- (18) Wheat, rye, barley, oats, peas, hay, straw, beef, mutton, veal, bacon, pork, butter, lentils, beans and potatoes. Bulletin of the International Statistical Institute, XIX, 132.
- (19) Wheat, rye, barley, oats, peas, beans, lentils, straw (2), hay, mixed bread, bread, rye bread, beef, pork, veal, mutton, (table) butter, eggs, wheat meal, whole barley, barley meal, buckwheat flour, rice, coffee (raw), coffee (Java), table salt and tallow. Bulletin of the International Statistical Institute, XIX, p. 134.
- (20) Butter, cheese, oxen, calves, pigs, wheat, rye, barley, oats, beans, peas, corn, potatoes and sugar beets. U.K. Cd. 6955, p. 362.
- (21) Amsterdam, Harlem, Arnhem, Utrecht, Leeuwarden and The Hague. Twenty-four goods. U.K. Cd. 6955, p. 358.
- (22) Wheat bread, rye bread, butter, beef, rice, potatoes, peas, pea meal and milk. U.K. Cd. 6955, p. 360.
- (23) Animal foods (7), vegetable foods (11), other foods (5), as purchased by Municipal Hospitals of Amsterdam. U.K. Cd. 6955, p. 362.
- (24) Of the following: (1) Spirits, liquors and oils; (2) colonial products, drugs, etc., (3) chemicals, etc., (4) colours in general for tinctures and, (5) flax, jute, etc., (6) cotton, (7) wool and hair, (8) silk, (9) hay, straw, (10) charts and books, (11) furs, (12) mineral metals, etc., (13) vehicles, (14) stone, earthenware, etc., (15) rubber gum, gutta percha, etc., (16) cereals, flour and paste, (17) animals and their products, (18) miscellaneous. I Prezzi delle Merci in Italia, 1910—12, Achille Necco. Panteleoni's number based on 19 imports and 12 exports shows a greater rise in the former and a less rise in the latter.
- (25) Bread, macaroni, rice, beef, sausage, fish, eggs; butter, olive oil, milk, coffee, sugar and wine. U.K. Cd. 6955, p. 363.
- (26) Wheat, bread, macaroni, rice, beef, coffee, sugar and wine. U.K. Cd. 6955, p. 364.

(27) Bread, beef, veal, kid, ham, sausage, lard, bacon, cheese, butter, milk, eggs, codfish, olive oil and wine. U.K. Cd. 6955, p. 365.

(28) Wheat, bread, wine, beef, pork, butter and rice. U.K. Cd. 6955, p. 367.

(29) (a) Foods, drinks and tobacco, (b) clothing and textiles, (c) minerals, fuel, timber and manufactured articles. U.K. Cd. 6955, p. 369.

(30) Rice, barley, wheat, beans, salt, beans preserved, jam, sugar, tea, bonits, beef, eggs, milk, plums and radishes. U.K. Cd. 6955 p. 370.

(31) Meat, dairy produce, potatoes, cereals, flour, colonial wares, textiles and miscellaneous. U.K. Cd. 6955, p. 373.

(32) Based on prices published in the Annual Abstract of the Municipal Statistical Office for the following articles: Beef, mutton, veal, pork (salt), venison, mackerel (salt), cod (split), butter, margarine, cheese, eggs, milk, flour (wheat), flour (rye), potato meal, barley meal, peas, beans, potatoes, coffee, sugar, petroleum, coal, coke, fire wood. U.K. Cd. 6955, p. 371.

(33) Based on statement prepared for the Municipality of Christiania, including food, clothing, rent, fuel and lighting, taxes and miscellaneous expenditures. U.K. Cd. 6955, p. 372.

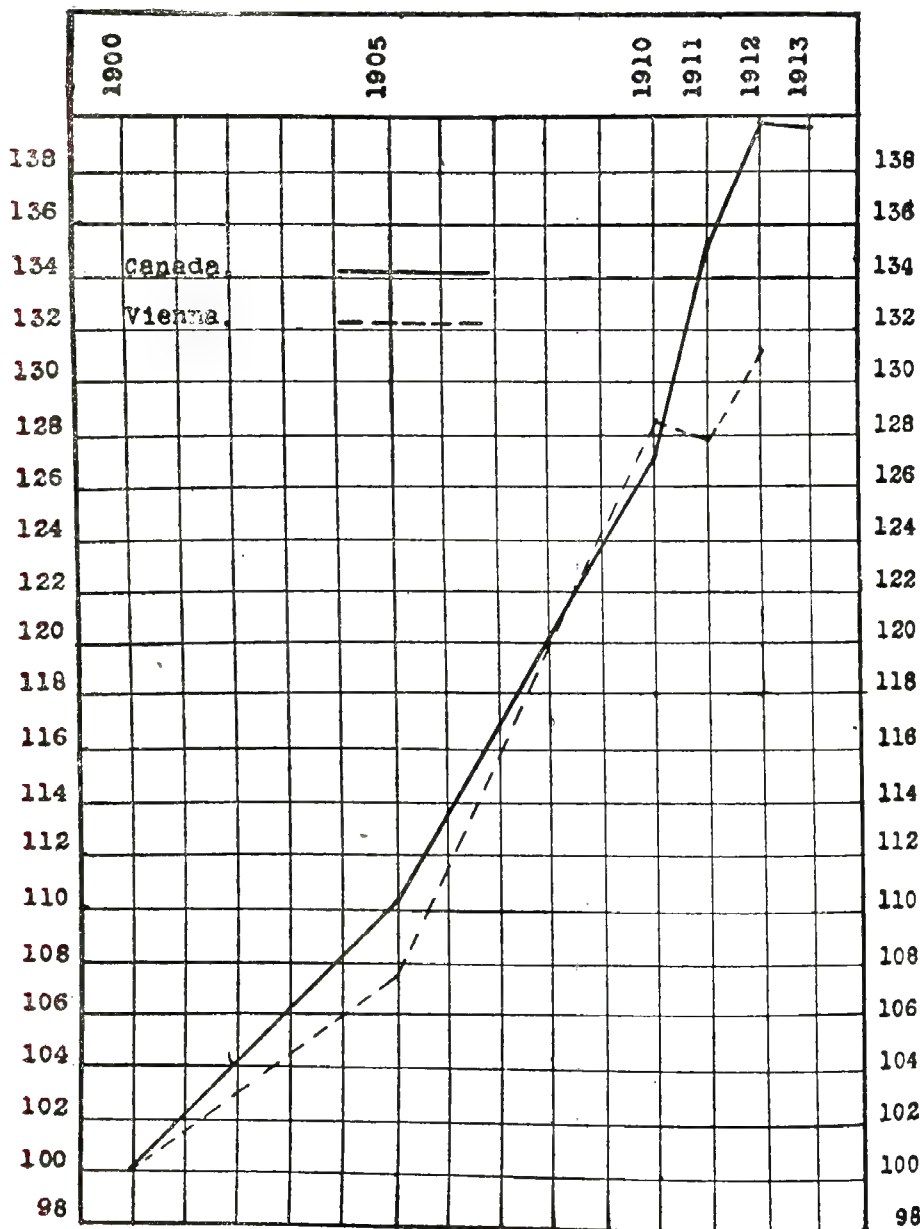
(34) No. (1) Cereal products, No. (2) animal products; oleaginous products, No. (4) textile materials, No. (5) mineral products, No. (6) dyes and chemical products, No. (7) Colonial wares. U.K. Cd. 6955, p. 375.

(35) Based on Russian Official Statistics of foods contained in immediately preceding list, as follows: p. 375 (a) rye, wheat, oats, barley, maize, peas, buckwheat, buckwheat meal, millet, wheat flour, rye flour, bran, malt, horned cattle, live sheep, live pigs, beef, pork, butter, herrings, olive oil, salt, sugar, coffee, tea, rice, pepper, currants, almonds and hops.

## COURSE OF RETAIL PRICES, CANADA AND VIENNA, 1900-1913.

Number of Articles Included, 13.

Prices in 1900=100.



## TREND OF RETAIL PRICES IN CANADA AND VIENNA, 1900-1913.

	No. of Commodities 13.			Prices 1900=100		
	1900	1905	1910	1911	1912	1913
Canada.....	100.0	110.3	127.2	135.1	139.8	139.6
Vienna.....	100.0	107.6	128.5	127.8	131.2	

Retail prices in Vienna apparently went up faster than in Canada until 1911, in which year and in 1912, however, the situation was reversed.

(b) An index number based on a list of 60 commodities in 22 towns as recorded by the Central Statistical Office of Hungary shows a rise of 34 per cent between 1900 and 1911. The 47 foods included in the list have advanced 37 per cent. Wheat has gone up 52 per cent, oats 68 per cent, beans 63 per cent, flour 33 per cent, chickens 59 per cent, beef 44 per cent, pork 65 per cent, bacon 56 per cent, milk 57 per cent, coal 29 per cent and hay and straw over 50 per cent. Altogether, 20 commodities<sup>1</sup> are included in the above list for which comparative price trends are available in the two countries; these are brought together in the following weighted index numbers:

## TREND OF RETAIL PRICES IN CANADA AND HUNGARY, 1900-1913.

	No. of Commodities 20		Prices 1900=100	
	1900	1905	1910	1911
Canada.....	100.0	110.5	130.8	137.3
Hungary.....	100.0	112.7	132.7	141.0

The cost of living in Hungary on this showing has gone up more rapidly since 1900 than in Canada.

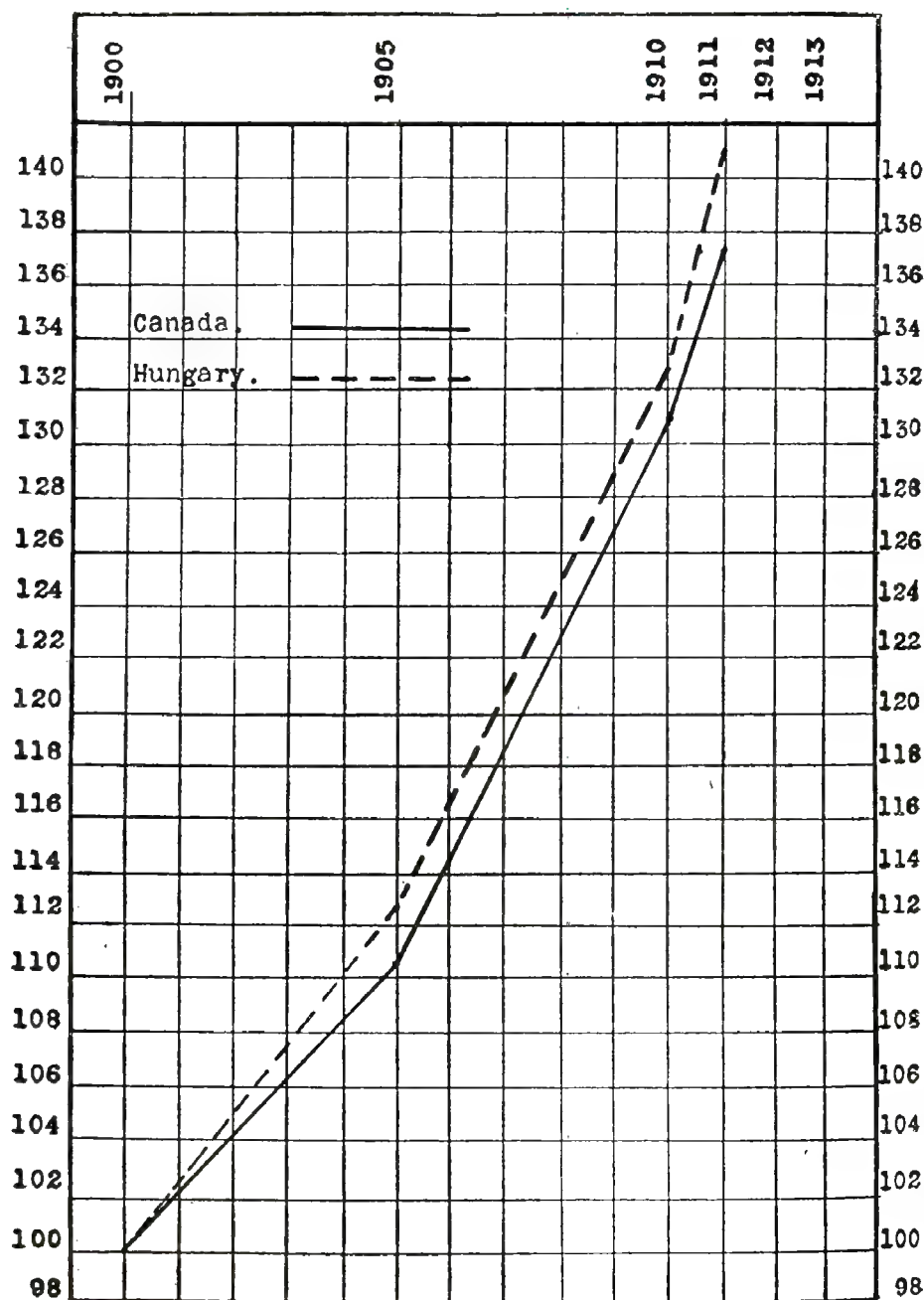
<sup>1</sup> Nameiy: beef, veal, mutton, pork, bacon, lard, eggs, butter, milk, cheese, flour, bread, rice, sugar, potatoes, coffee, vinegar, wood, coal and beans.



## COURSE OF RETAIL PRICES, CANADA AND HUNGARY, 1900-1913.

Number of Articles Included, 20.

Prices in 1900=100.



## BELGIUM.

Two index numbers, one of wholesale prices and the other of retail, will be found in the accompanying table.

(1) *Wholesale Prices*.—The former, that of Prof. E. Waxweiler, covers 10 articles at Brussels. It shows a rise of 13 per cent as between 1900 and 1910, eggs and meat having gone up fastest. It has not been compiled for subsequent years. Summarizing his results, Prof. Waxweiler states: "For the last five years the prices of most of the articles exhibited an upward tendency. Nevertheless the level of prices to-day (i.e. 1910) does not appear to be exceptional."

Another wholesale index number for Belgium is that constructed by Mr. Maurice Sauveur, based on data published by the Minister of the Interior and Agriculture (*Annuaire de la Belgique*).<sup>1</sup> It is compiled only for individual articles and for certain groups. It shows an increase of 26 per cent between 1900 and 1909 in cereals (wheat, rye, barley, meslin, spelt and buckwheat), of 32 per cent in vegetables (peas, beans and potatoes) of 17 per cent in meats (beef, veal, mutton and pork) and of 8 per cent in butter. Combining the 14 articles<sup>2</sup> which are common to Mr. Sauveur's statistics and those of Canada the following comparison of the wholesale price trends in the two countries is obtained.

## TREND OF WHOLESALE PRICES IN CANADA AND BELGIUM, 1900-1913.

Number of Articles 14.

Prices 1900=100.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910
Canada.....	100.0	106.0	115.3	115.5	110.6	118.1	121.7	137.5	140.9	141.9	140.3
Belgium.....	100.0	108.2	107.7	107.0	106.5	113.0	115.0	117.3	114.4	120.2	

*Retail Prices*.—A retail index number for Belgium was compiled by the United Kingdom Department of Labour based on the retail prices of 11 foods in 16 localities as collected by the Belgian Department of Labour. It shows a gain of 32 per cent between 1900 and 1912. The chief increases have been in beef (70 per cent), haricots (49 per cent), bacon (46 per cent), pork (44 per cent), and coffee (31 per cent). Sugar has gone down 25 per cent. Taking the 10 articles<sup>3</sup> common to the Canadian and Belgian statistics of retail prices, the following weighted index number has been compiled.

## TREND OF RETAIL PRICES IN CANADA AND BELGIUM, 1900-1913.

Number of Articles 10.

Prices 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	111.5	131.7	144.9	145.1	149.2
Belgium.....	100.0	108.9	119.5	126.4	129.3	

Both wholesale and retail prices it will be seen have been less buoyant in Belgium than in Canada.

<sup>1</sup>U.K., Board of Trade, C. d 6955, p. 333.

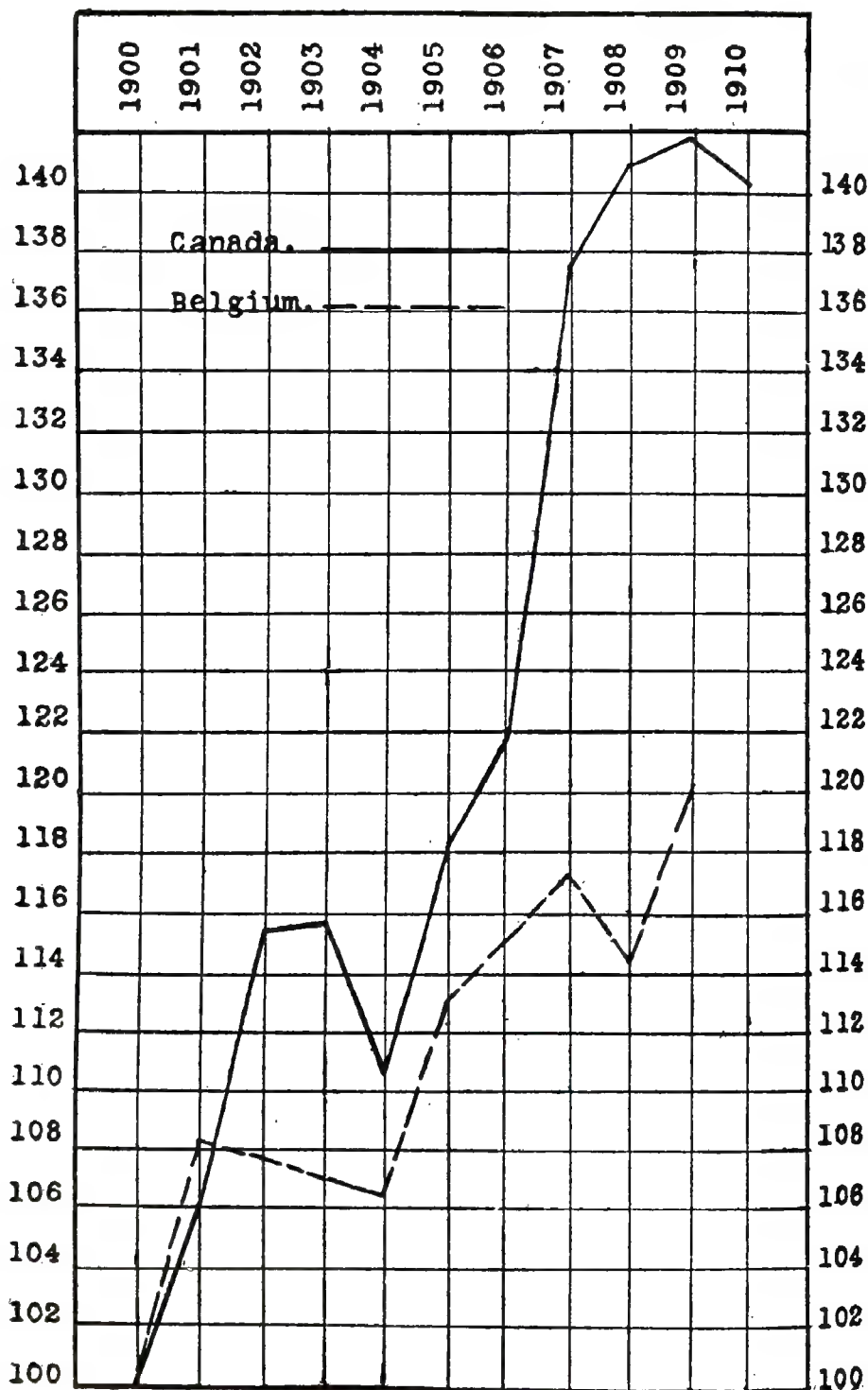
<sup>2</sup>Namely: barley, hay, oats, peas, rye straw, wheat, beef, mutton, pork, veal, butter, beans, potatoes.

<sup>3</sup>Namely, beef, pork, bacon, eggs, butter, bread, sugar, potatoes, rice, coffee.

## TREND OF WHOLESALE PRICES IN CANADA AND BELGIUM, 1900-1910.

Number of Articles, 14.

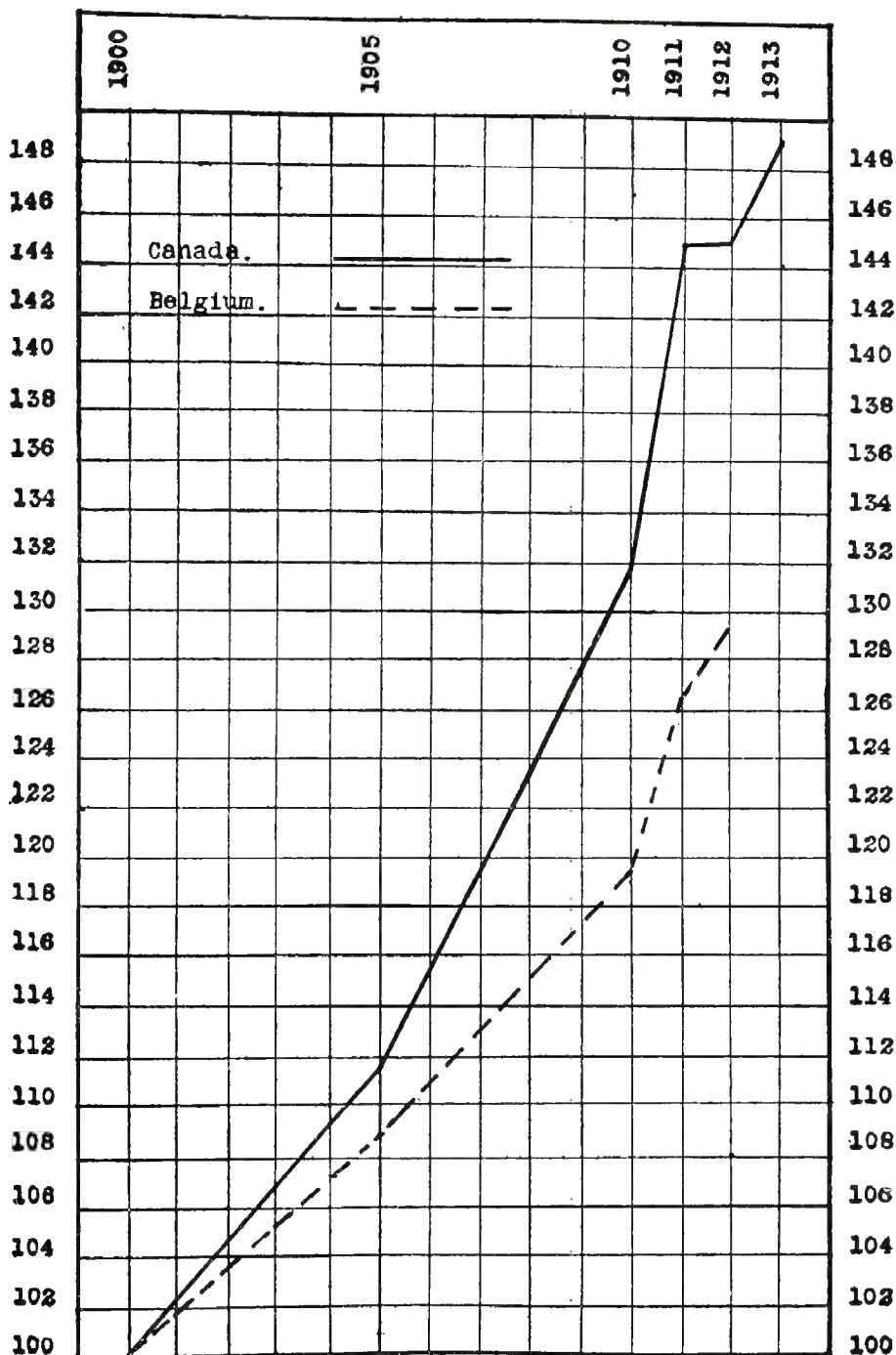
Prices in 1900=100.



## COURSE OF RETAIL PRICES, CANADA AND BELGIUM, 1900-1913.

Number of Articles Included, 10.

Prices in 1900=100.



## (3) DENMARK.

An index number based on import and export valuations by the Statistical Department of Denmark shows a rise of 18 per cent between 1900 and 1912. Statistics for the individual commodities are not given so that comparisons on the same basis with Canadian prices are not possible.

## (4) FRANCE.

Five index numbers of prices in France will be found in the accompanying table:

(1) De Foville's numbers of import and export values is based on the annual publications of the Board of Customs. Imports and exports are first valued at last year's prices. The difference between this and a subsequent valuation at current prices is made the basis of the change in the number. De Foville's (France), Sauerbeck's (Great Britain) and Neccos (Italy) numbers are chartered together on p. 314.

(2) *Import Values*.—An index number based on the import values of 43 articles<sup>1</sup> is published by the French Ministry of Labour. The foods alone of the French number have risen 28 per cent.

(3) A second series of official index numbers based on the market prices of 45 articles shows a rise of 23.7 per cent. The foods alone in this series have advanced by 28 per cent. The articles correspond closely to those of the Sauerbeck number of Great Britain.

(4) A well known French index number of wholesale prices is that of *La Reforme Economique*. The number includes 21 articles, the rise in which since 1900 has amounted to 13 per cent.

(5) *Cost of Living*. As the result of a special investigation by the French Statistical Department into the cost of food, fuel and lighting, based on the consumption of a typical Paris artisan, (carpenter) it is estimated that a rise of 15 per cent has taken place since 1900. If wine and sugar are omitted from the calculations the increase is shown at 23 per cent (considerable declines in the price of wine and sugar having taken place as the result of financial legislation). Working class rentals advanced 8 per cent at Paris in the first ten years of the century. Combining food, fuel, lighting and rentals a rise between 1900 and 1910 is estimated at 13 or 14 per cent according as the calculation includes or excludes wine and sugar.<sup>2</sup>

<sup>1</sup> Since 1905 the index number is calculated on market prices, and is extended to 45 articles (see *Annuaire Statistique de la France*, 1912, p. 223).

<sup>2</sup> France, Ministère du Travail et de la Prévoyance Sociale. *Statistique générale de la France. Salaires et coût de l'existence à diverses époques, jusqu'en 1910*. Paris, Imprimerie Nationale, 1911. This report contains a compilation of retail prices of food secured from the bread-tax records, the slaughter-house sales books, the books at the central markets, the records of co-operative stores, the accounts of institutions such as almshouses and boarding schools, the books of restaurants, etc. The wholesale prices on the Paris produce exchanges are also given. The wage data were secured principally from statements of the councils of prud'hommes and from the pay rolls of Government establishments. Computations of the cost of living are given.



There are 38 articles contained in the French import price statistics as above described for which wholesale statistics in the case of Canada are available.<sup>1</sup> Combining these for each country in turn the following index numbers are obtained:—

## TREND OF WHOLESALE PRICES IN CANADA AND FRANCE, 1900-1913.

No. of Articles, 38\*.

Prices in 1900 = 100.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100.0	98.4	100.1	101.4	100.2	107.4	112.7	119.0	112.5	114.1	119.6	126.0	138.8	128.3
France...	100.0	95.3	95.3	95.8	95.5	100.9	107.0	109.6	104.9	106.7	113.3	118.6		

On the above analysis prices have uniformly tended towards a lower level in France than in Canada, though the spread is not excessive.

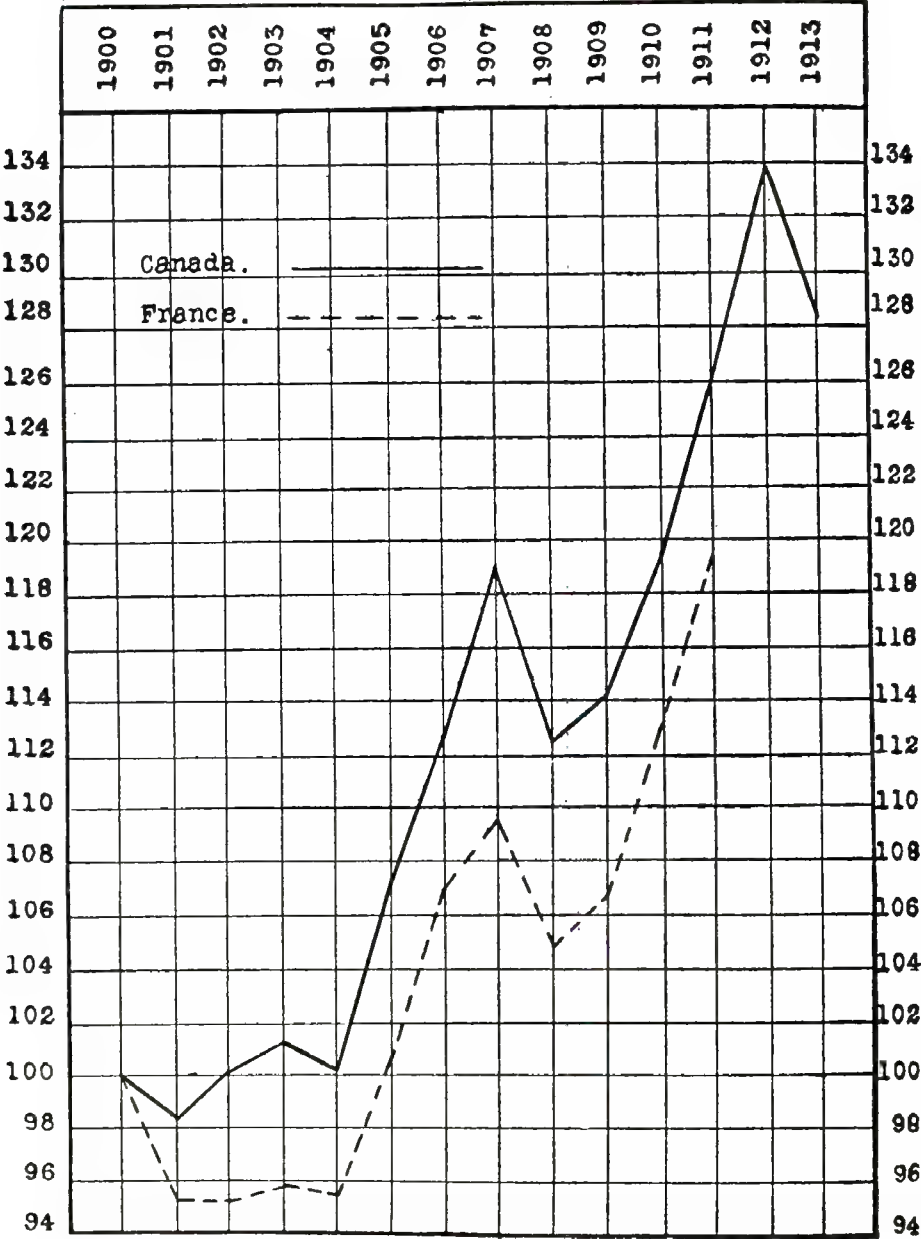
<sup>1</sup>The index numbers for the individual commodities are not published in the *Annuaire Statistique* but were worked out from the actual prices quoted therein. It is to be remembered that import prices do not necessarily reflect with accuracy the general level of internal prices.

\*Namely, barley, corn, flax, oats, rye, wheat, cattle (live), hogs (live), sheep (live), butter, cheese, potatoes, flour, rice, coffee, cocoa, sugar (granulated), wool, cotton, flax fibre, raw silk, jute, hides, tallow, copper, iron (pig), iron (bar), lead, steel billets, tin, zinc, coal, coal oil, oak, linseed oil, indigo, alcohol, sulphuric acid.

COURSE OF WHOLESALE PRICES, CANADA AND FRANCE, 1900-1913.

Number of Articles Included, 38.

Prices in 1900=100.



## (5) GERMANY.

*Wholesale Prices.*—Three numbers are given herewith: (1) a weighted index number based on 17 articles by Herr Calwer shows a rise of 29 per cent between 1900 and 1912, but a decline of 6 points in 1913.<sup>1</sup> Herr Otto Schmitz's unweighted number of 29 articles rose 22 per cent between 1900 and 1912. (3) The index number of the *Vossische Zeitung*, which includes 39 commodities, had risen in 1912 by 26 per cent, but declined in 1913.

The Imperial Statistical Office of Germany has published index numbers for 44 commodities since 1899, but has not calculated an aggregate number. Among the more important increases shown in these statistics are the following: wheat 38 per cent, corn 43 per cent, potatoes 60 per cent, pigs and calves 50 per cent, coffee 70 per cent, tea 11 per cent, hides 64 per cent; on the other hand pepper, raw silk, pig and bar iron and English coal have gone down since 1900.<sup>2</sup>

The official wholesale price statistics of Germany and Canada permit direct comparison to be made in the case of 34 commodities.<sup>3</sup> These are combined in the following index numbers:

## TREND OF WHOLESALE PRICES IN CANADA AND GERMANY. 1910-1913.

Number of articles, 34.

Prices in 1900—100.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100.0	99.8	104.6	108.9	108.6	111.9	115.2	118.9	113.6	122.5	126.9	127.9	139.8	135.9
Germany.	100.0	94.5	95.5	98.0	100.1	102.9	109.8	114.5	105.2	108.5	111.5	118.5	128.7	

It would appear that prices have been somewhat less buoyant in Germany than in Canada, though the spread is not very great.

<sup>1</sup>The courtesy of Herr Calwer in supplying figures for 1913 is acknowledged.

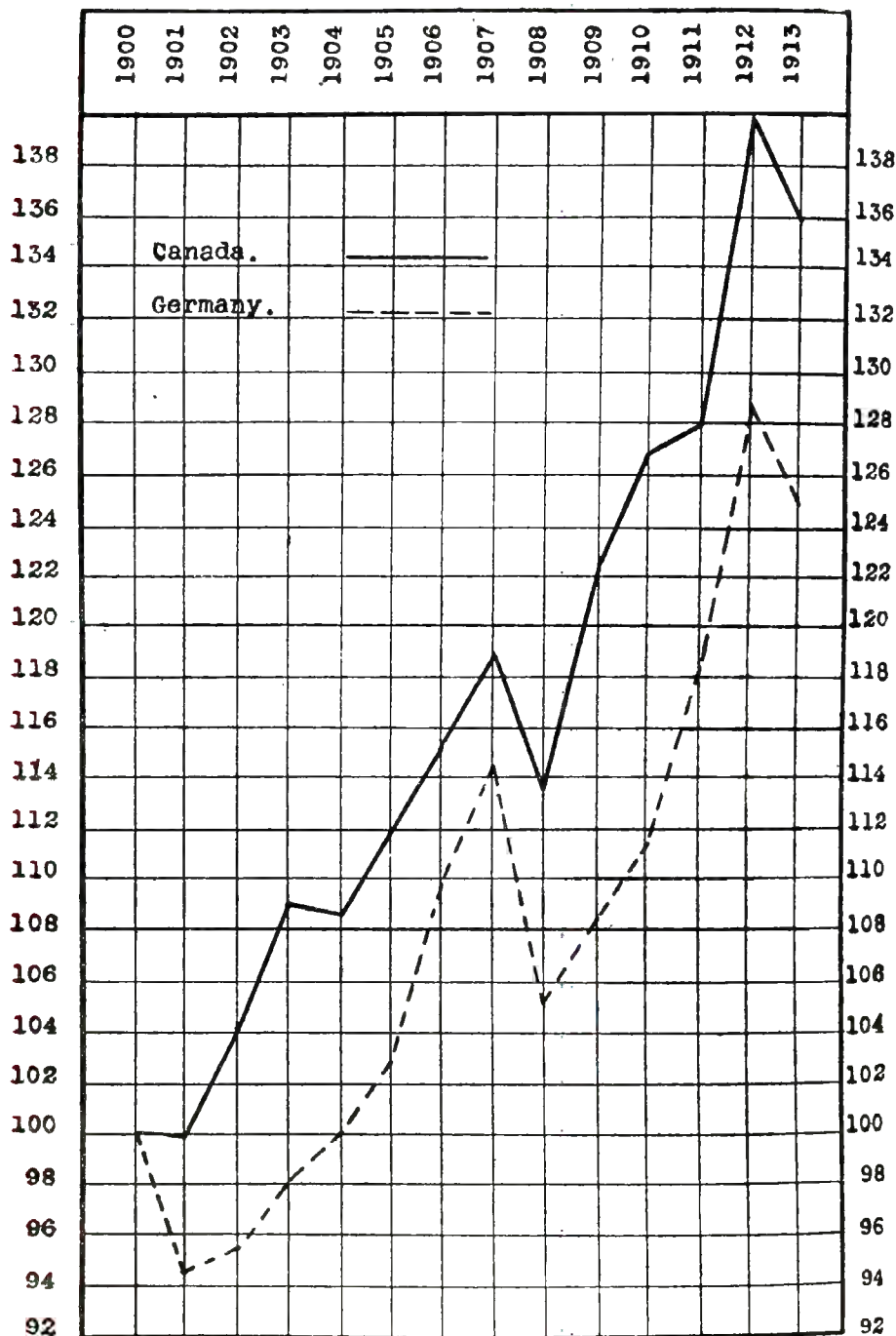
<sup>2</sup>The Imperial Statistical Office also published in 1909 a study of the household budgets of 860 families of persons of moderate income covering the year 1907-1908. (Germany.—*Statistisches Amt. Abteilung für Arbeiterstatistik. Erhebung von Wirtschaftsrechnungen minderbemittelter Familien in Deutschen Reiche. Bearb. im Kaiserlichen Statistischen Amte, Abteilung für Arbeiterstatistik.* Berlin, C. Heymanns Verlag, 1909). Practically all the incomes were less than \$1,200 (5,000 marks), the majority being from \$200 to \$500. The principal value of this study is its detailed account of the various items of expenditure of the families studied. A digest of the contents of this report is given in bulletin 88 of the United States Bureau of Labour. No attempt is made to compare findings with earlier data.

<sup>3</sup>Namely, barley, corn, oats, rye, wheat, cattle, hogs, lard, sheep, butter, herrings, potatoes, flour, rice, coffee, tea, pepper, wool, cottons, cotton, silk, jute, hides, copper, pig iron, bar iron, lead, spelter, tin, coal, coal oil, (U. S. standard) coal oil, tobacco, hops.

## COURSE OF WHOLESALE PRICES, CANADA AND GERMANY, 1900-1913.

Number of Articles Included, 34.

Prices in 1900=100.



*Retail Prices.*—Four German index numbers of retail prices will be found in the accompanying table, namely, those of Dr. Zahn,<sup>1</sup> weighted, Herr Calwer, weighted, United Kingdom Department of Labour, weighted, and Von Zimmerman, unweighted. Three of the numbers agree in showing a rise of approximately over 25 per cent in 1911. The fourth, which reflects contract rather than retail prices, (i.e., the cost of the weekly ration served to the German blue-jacket in home ports) had risen only 14 per cent in 1911; this, however, had increased to 24 per cent in 1912. Dr. Zahn's number for 1913 showed a rise of 35 per cent compared with 1900.

A composite index number of Herr Von Hartwig on wholesale and retail price of 27 foods at Leubeck shows a rise of 22.3 per cent in 1912.

The retail price statistics of individual articles in Germany contained in the United Kingdom Board of Trade report, 1912,<sup>2</sup> enable some interesting comparisons to be made with the similar statistics for Canada. Four comparative index numbers have been worked out for these as follows:

## TREND OF RETAIL PRICES IN CANADA AND PRUSSIA, 1900-1913.

Number of Articles, 9.\*

Prices in 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	113.5	137.6	150.5	152.8	158.9
Prussia.....	100.0	112.8	126.7	135.0		

\*Namely, beef, veal, mutton, pork, bacon, eggs, butter, flour, potatoes.

## TREND OF RETAIL PRICES IN CANADA AND BAVARIA, 1900-1913.

Number of Articles, 9.\*\*

Prices in 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	112.3	133.3	144.9	148.8	152.2
Bavaria.....	100.0	110.5	122.1	129.5		

(\*\*) Namely, beef, pork, veal, eggs, milk, butter, bread, flour, potatoes.

<sup>1</sup>Figures for 1911, 1912, 1913, supplied by courtesy of Dr. Zahn.

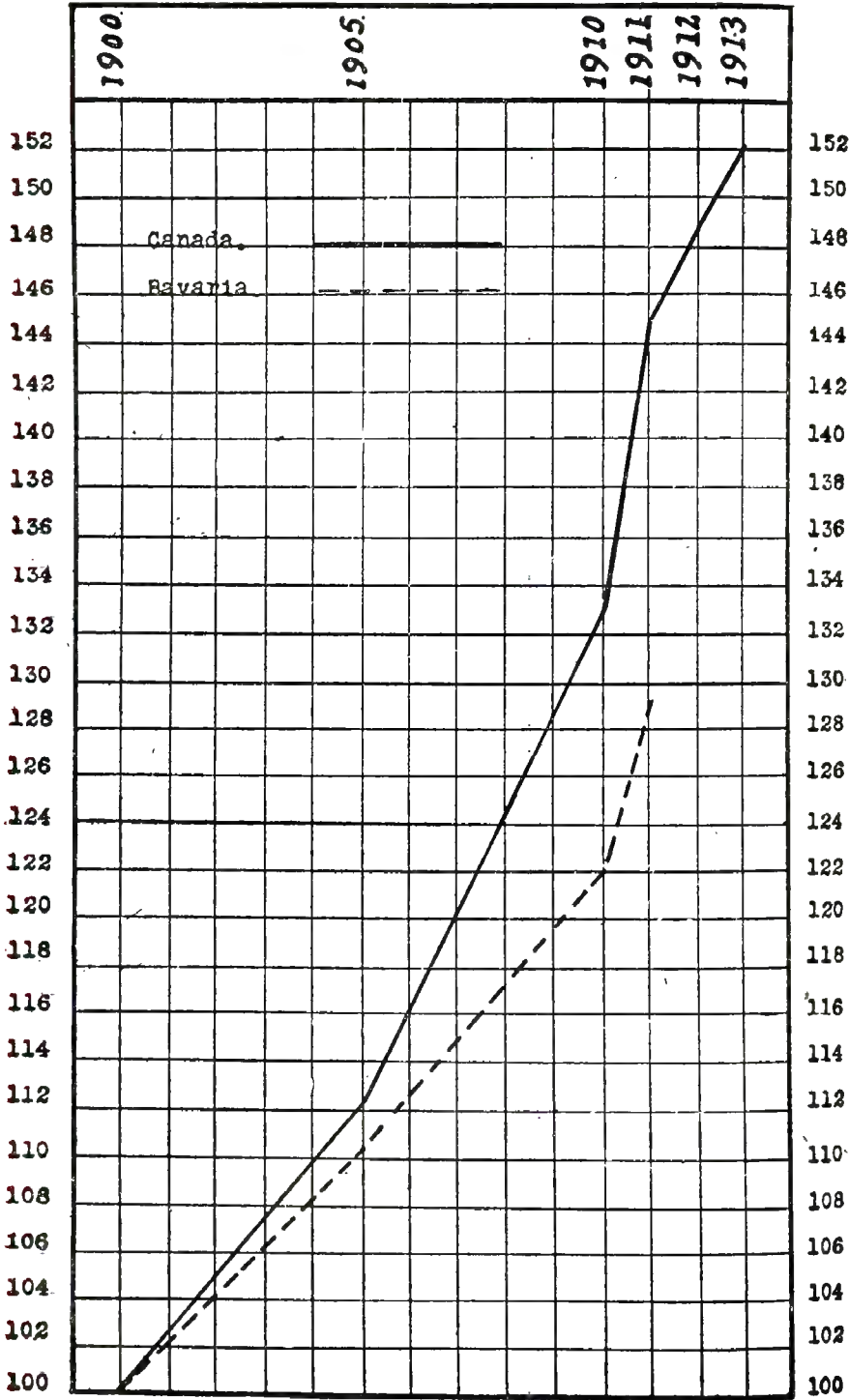
<sup>2</sup>C. D. 6955.



COURSE OF RETAIL PRICES, CANADA AND BAVARIA, 1900-1913.

Number of Articles Included, 9.

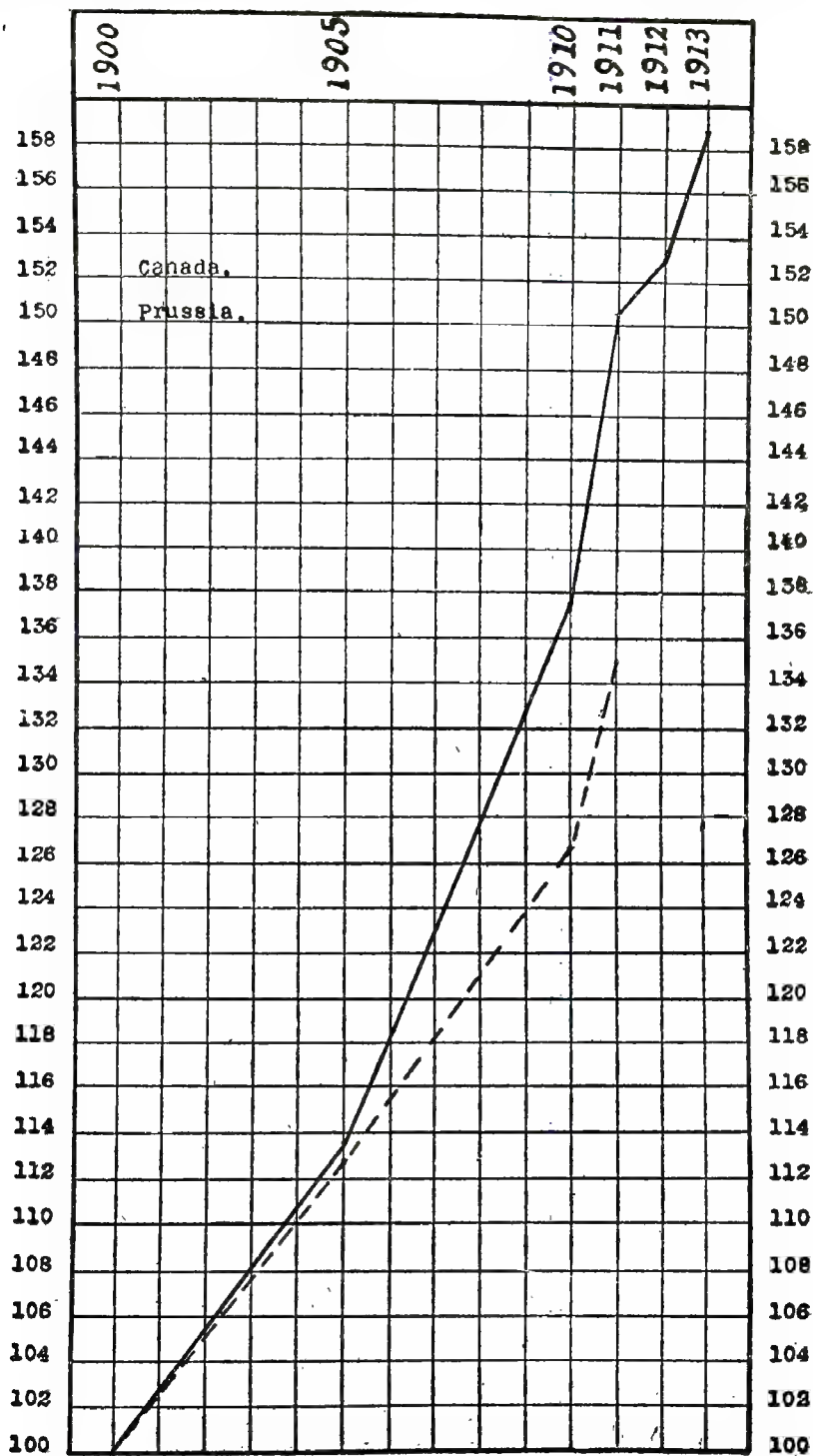
Prices in 1900=100.



## COURSE OF RETAIL PRICES, CANADA AND PRUSSIA, 1900-1913.

Number of Articles Included, 9.

Prices in 1900=100.



## TREND OF RETAIL PRICES IN CANADA AND BADEN, 1900-1913.

Number of Articles, 12\*

Prices in 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	112.0	134.4	144.2	147.8	154.0
Baden.....	100.0	108.1	125.5	130.2	132.9	

\* Namely, beef, mutton, pork, bacon, veal, eggs, milk, butter, bread, flour, coffee, potatoes.

## TREND OF RETAIL PRICES IN CANADA AND WURTEMBERG, 1900-1913.

Number of Articles, 11\*\*.

Prices in 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	111.1	131.7	143.5	146.8	149.4
Wurtemberg.....	100.0	110.0	129.7	133.6	.....	.....

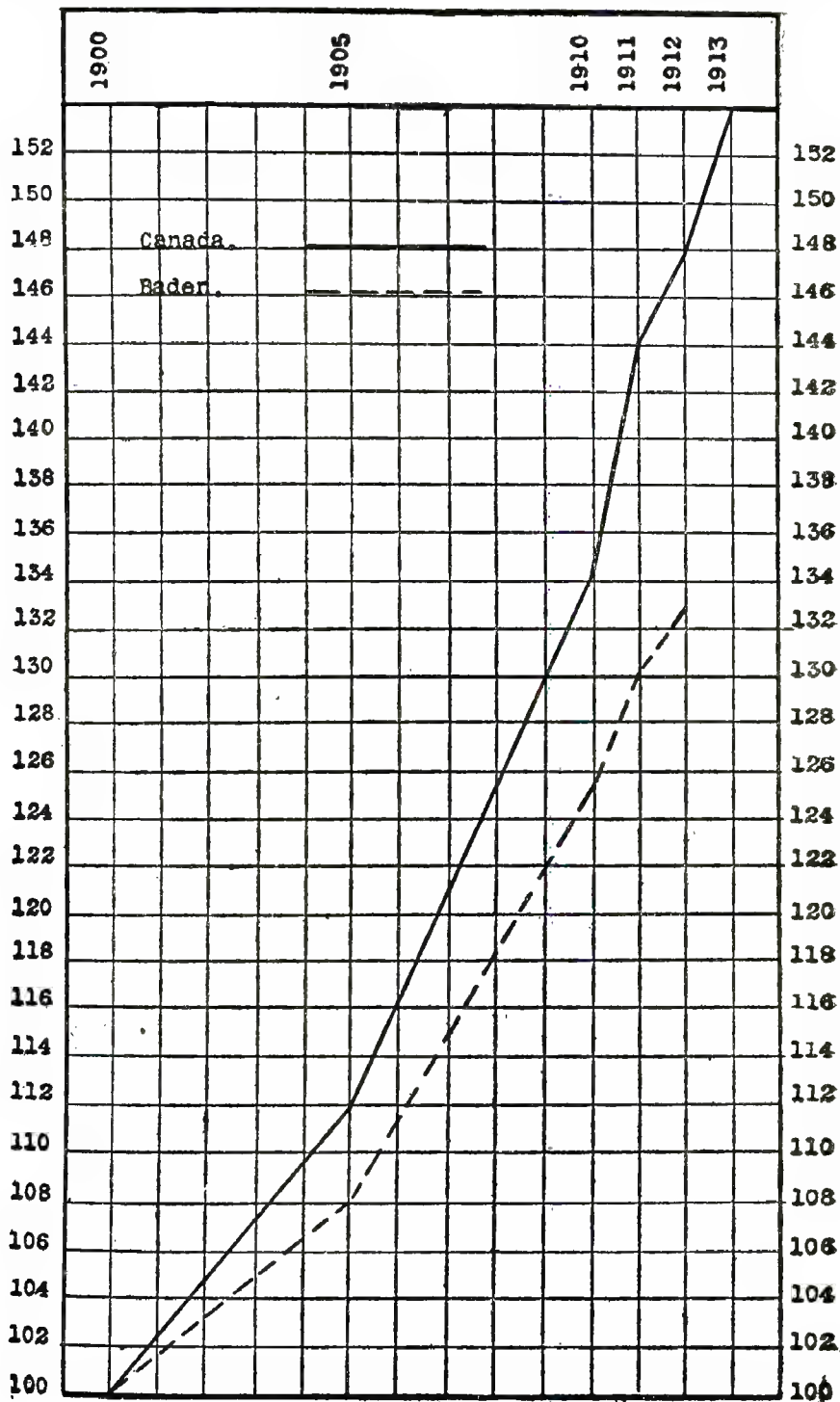
\*\*Namely, beef, mutton, pork, veal, eggs, milk, butter, bread, flour, sugar, potatoes.

The general conclusion from these tables is that retail prices have gone up more rapidly in Canada than in Germany, one third to half again as fast.

## COURSE OF RETAIL PRICES, CANADA AND BADEN, 1900-1913.

Number of Articles Included, 12.

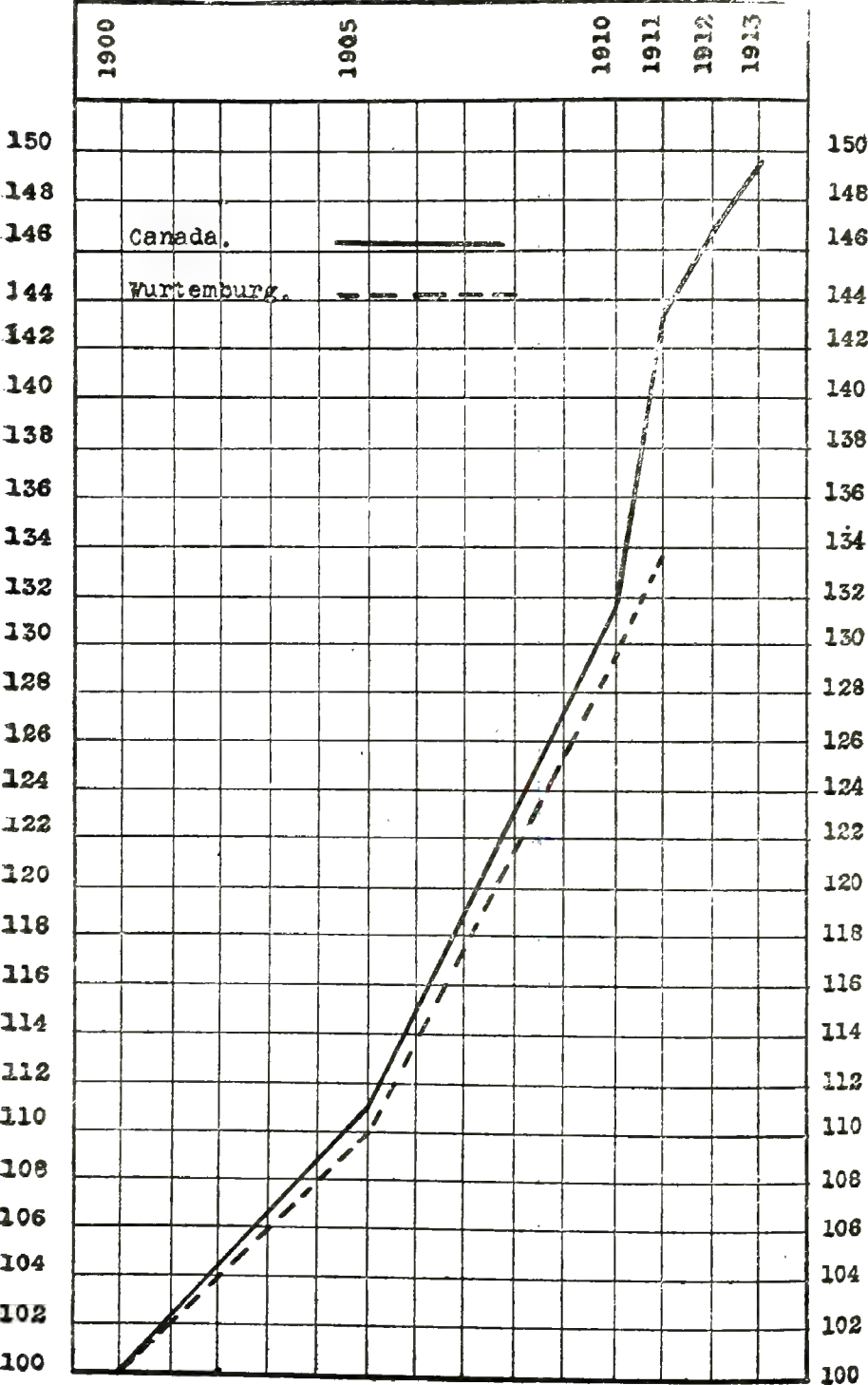
Prices in 1900=100.



COURSE OF RETAIL PRICES, CANADA AND WURTEMBERG, 1900-1913.

Number of Articles Included, 11.

Prices in 1900=100.





## (6) HOLLAND.

*Wholesale Prices.*—An index number compiled by the United Kingdom Board of Trade of the wholesale prices of agricultural products in Holland shows a rise of 35 per cent between 1900 and 1911. Potatoes went up no less than 72 per cent, calves 50 per cent and cheese 47 per cent. Comparative index numbers for Canada and Holland based on 12 commodities which are common to both series of statistics are as follows:—

## TREND OF WHOLESALE PRICES IN CANADA AND HOLLAND, 1900-1913.

Number of commodities, 12\*.

Prices in 1900=100.

—	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada....	100.0	104.5	115.2	116.3	108.7	118.2	120.2	130.3	136.8	139.6	139.2	146.8	169.5	145.5
Holland....	100.0	113.1	105.6	104.5	106.0	112.0	112.5	118.5	116.1	121.3	119.4	130.5	.....	.....

\*Namely, butter, cheese, beef, veal, pigs, wheat, rye, barley, oats, beans, corn and potatoes.

*Retail Prices.*—The Dutch Department of Labour has compiled an index number from 1893 to 1912 based on the retail prices of 29 articles of ordinary household use (24 being foods at prices charged by Co-operative Stores in Amsterdam, Haarlem, Arnhem, Utrecht, Leeuwarden, and the Hague). The rise shown by this number in 1912 compared with 1900 is 21 per cent, but the foods of the list went up 23 per cent. Combining the eight articles common to the two series of statistics\*\* the following comparison is obtained.

## TREND OF RETAIL PRICES IN CANADA AND HOLLAND, 1900-1913.

Number of commodities, 8\*\*

Price in 1900=100.

—	1900	1905	1910	1911	1912	1913
Canada.....	100.0	106.7	115.3	123.9	125.0	120.2
Holland.....	100.0	102.7	111.0	116.1	122.0	

\*\*Namely, cheese, flour, oatmeal, rice, beans, sugar, tea and coffee.

By the above showing the rise in prices has been more pronounced in Canada than in Holland, though the latter saw a rapid upward movement in 1912.

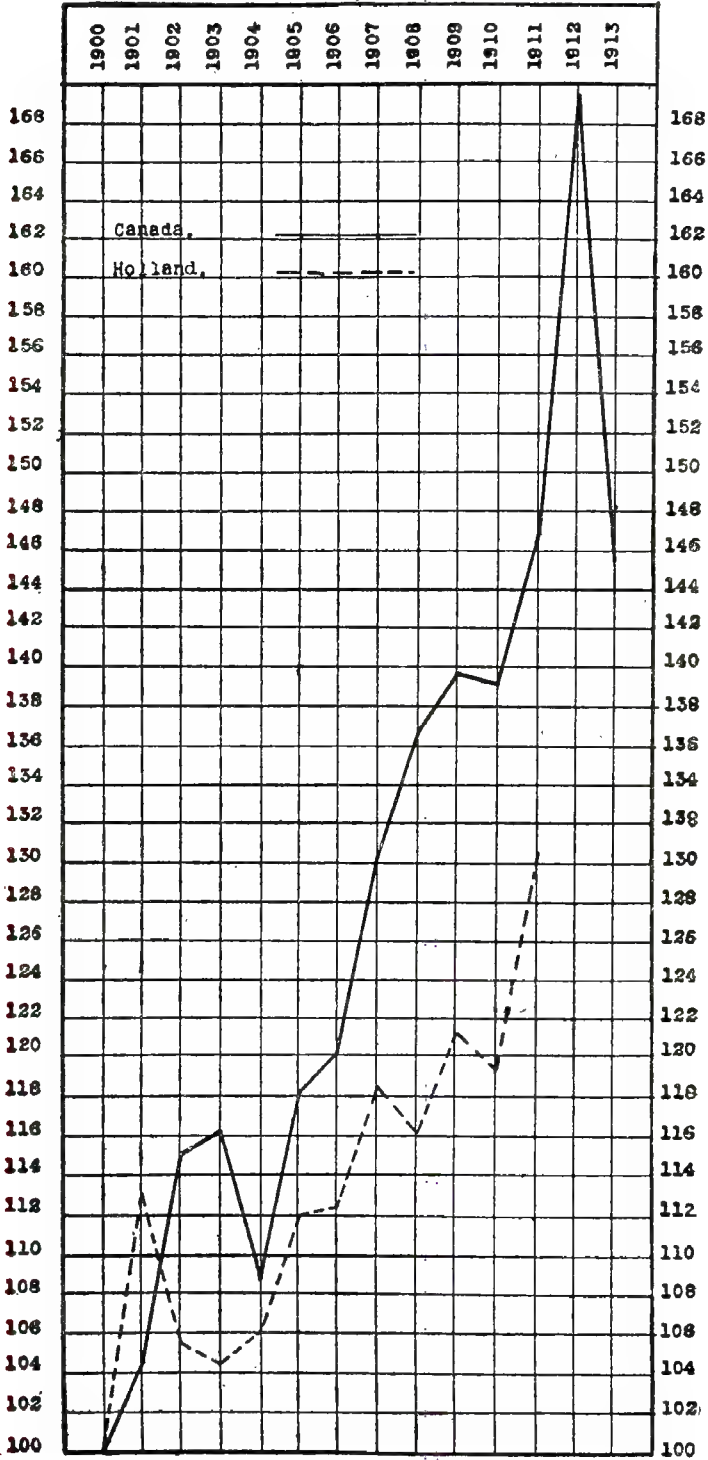
*Contract Prices.*—Two other index numbers based on contract prices are given herewith. One reflects the price paid by three large State institutions for food supplies, and the other the contract price for food paid at the municipal hospitals of Amsterdam.<sup>1</sup> Eight articles are included in the former, which shows a rise of 22 per cent in 1912. The 23 articles included in the latter went up 33 per cent during the same interval.

A comparative budget at 1912 retail prices in Montreal and Amsterdam<sup>2</sup> is given in the accompanying table.

<sup>1</sup>Amsterdam. Bureau van statistik. Prijzen van levensmiddelen te Amsterdam. Prix des vivres à Amsterdam. Amsterdam, J. Muller, 1911. (Statistische Mededeelingen uitgegeven door het Bureau van Statistiek der gemeente Amsterdam . . . no. 35). Text in Dutch and French.

<sup>2</sup>The figures for Amsterdam are from No. 41 Jaarcijfers, 1912, p. 47.

COURSE OF WHOLESALE PRICES, CANADA AND HOLLAND, 1900-1913.  
Number of Articles Included, 12. Prices in 1900=100.



## BUDGET OF RETAIL PRICES, AMSTERDAM AND MONTREAL, DECEMBER, 1912.

Commodity.	Quantity consumed per week.	Amsterdam.		Montreal Price per lb. cents	Amsterdam	Montreal
		Price per 2.2 lb. †, cents.*	Price per lb. cents.			
Bread.....	15 lb.	16.37	3.	4 $\frac{2}{3}$	45.0	70.0
Roast beef.....	2 lb.	110.	20.0	15.	40.0	30.0
Sirloin steak.....	2 lb.	130.	23.6	20.	47.2	40.0
Veal.....	1 lb.	180	32.7	18.	32.7	18.0
Mutton.....	1 lb.	120	21.8	16.	21.8	16.0
Pork, lean.....	1 lb.	100	18.2	14.	18.2	14.0
Coal oil, gal.....	1 gal.	9.5**	43.3	23.	43.3	23.0
Coffee.....	$\frac{1}{2}$ lb.	143.0	52.0	60.	13.0	15.0
Sugar.....	6 lb.	54.	4.9	5 $\frac{1}{2}$	29.4	34.5
Beans.....	2 lb.	20 **	4.9	6	9.8	12.0
Flour.....	10 lb.	20	3.6	4	36.0	40.0
Starch.....	$\frac{1}{2}$ lb.	20	3.6	7	1.2	2.3
Dried apples.....	1 lb.	70	12.7	13	12.7	13.0
Dried prunes.....	1 lb.	50	9.1	12 $\frac{1}{2}$	9.1	12.5
Butter.....	3 lb.	160	30.0	34.5	90.0	103.5
Old cheese (Gouda).....	1 lb.	100	18.2	22	18.2	22.0
New cheese (Gouda).....	1 lb.	80	14.5	20	14.5	20.0
					\$482.1	\$485.8

\*Dutch cent=2.5 cent Canadian.

\*\*Litre=22 gallons.

†1 kilogramme.

## (7) ITALY.

*Import and Export Values.*—Index numbers compiled by Signor A. Necco, of the University of Turin, show a rise in prices between 1900 and 1912 of about 10 per cent. It is interesting to compare this number with those of De Foville in France and of Sauerbeck in Great Britain. (See accompanying chart.)

*Contract Prices.*—Two index numbers based on contract prices are given. The first reflects the prices paid by 43 State institutions for 12 foods. From 1890 to 1906 prices were stationary or slightly downward. Between 1907 and 1913, however a rise of 23.7 per cent took place, the articles chiefly affected being eggs, pork, sausages, olive oil, and wine. The second number reflects 8 foods as supplied to the Italian war office. The rise shown by this is somewhat less, namely, 20 per cent, chiefly in wine and beef since 1909.

*Retail Prices.*—Two numbers are given reflecting respectively the course of 16 foods in Rome and 7 foods in Milan. The former were up 7. per cent in 1912 after having been 8.3 per cent up in 1911; the later were up 30.9 in 1913. Taking the articles, 5 in number, common to Canada and Milan, the following comparison is arrived at:—

## TREND OF RETAIL PRICES IN CANADA AND MILAN, 1900-1913.

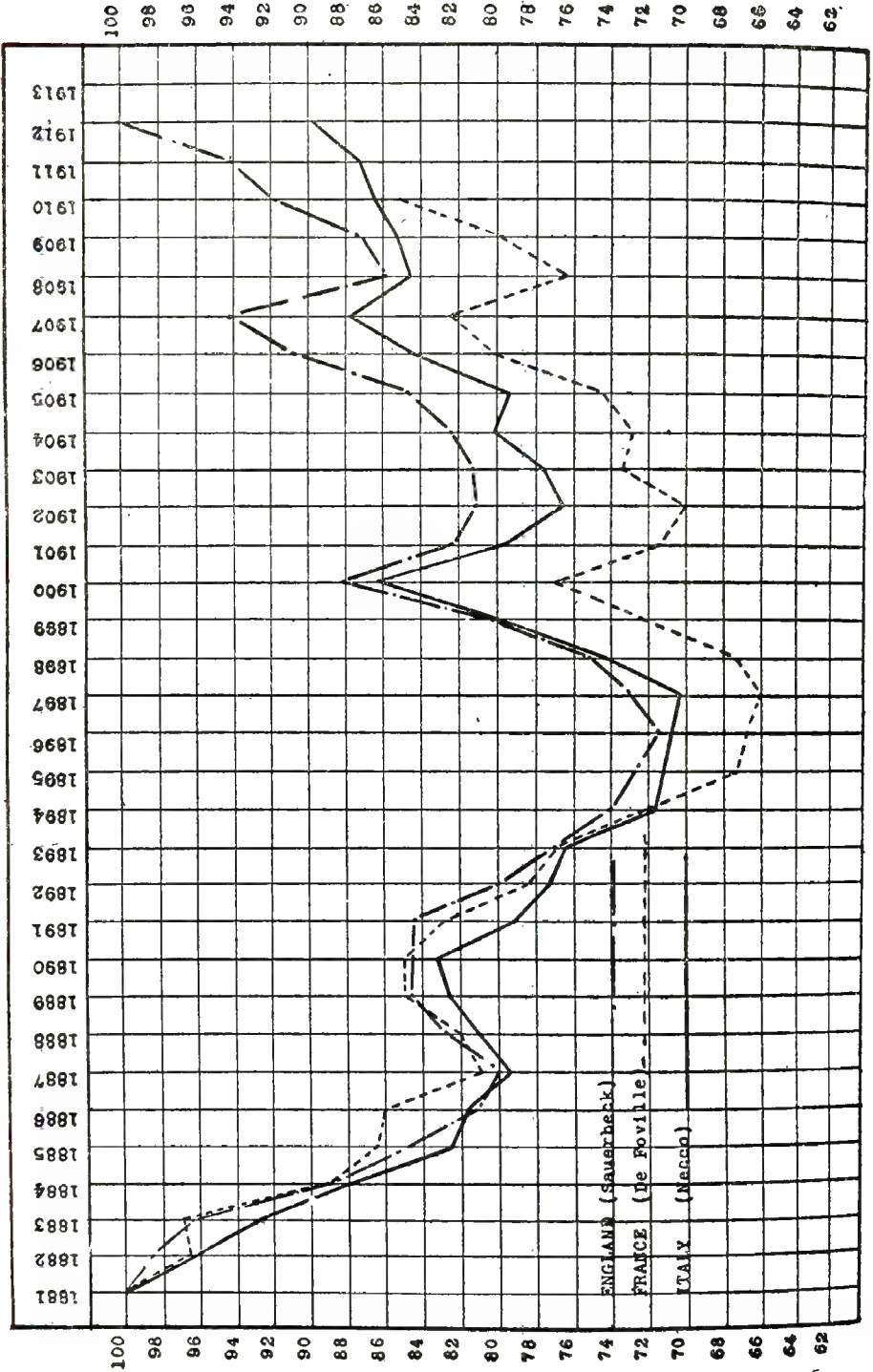
Number of articles, 5\*.

Prices 1900=100.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	111.0	127.3	132.2	141.0	144.3
Milan.....	100.0	101.2	124.8	130.8	130.8	130.9

\*Namely, beef, pork, bread, butter, rice. The investigation at Rome covers 9 articles included in the Canadian statistics, but for 5 of these, namely, butter, cheese, lard, veal and bacon, prices are shown to be unchanged.

THE COURSE OF PRICES IN ENGLAND, FRANCE AND ITALY, 1881-1913.



## (8) JAPAN.

Two index numbers are given herewith, both of wholesale prices and both of the Japanese Department of Agriculture and Commerce.

(1) The first covers sixty-three articles including, (a) foods, drinks and tobacco, (b) clothing and textiles, (c) minerals, fuel, timber and manufactured articles. The average rise in these was 33 per cent. Taking the food items alone, the rise was 54 per cent. Textiles rose 30 per cent.

(2) The second number covers 15 foods. Like the food section of the preceding number this shows a rise of 50 per cent between 1900 and 1912.

As between Canada and Japan, comparative wholesale price statistics are available for 23 articles. Combining these the following numbers are obtained:—

## TREND OF WHOLESALE PRICES IN CANADA AND JAPAN, 1900-1913.

Number of articles, 23\*.

Prices in 1900=100.

—	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100.0	104.4	100.8	104.3	106.7	104.3	106.6	118.6	118.4	119.7	123.0	123.0	131.9	130.0
Japan.....	100.0	98.1	96.9	102.0	107.2	116.9	116.5	122.8	124.5	120.2	121.3	125.3	131.9	

\*Namely, barley, hay, straw, wheat, beef, eggs, milk, rice, tea, sugar, salt, cotton, prints, silk, pig iron, coal, petroleum, pine (balk), pine (plank), shingles, nails, paper, indigo.

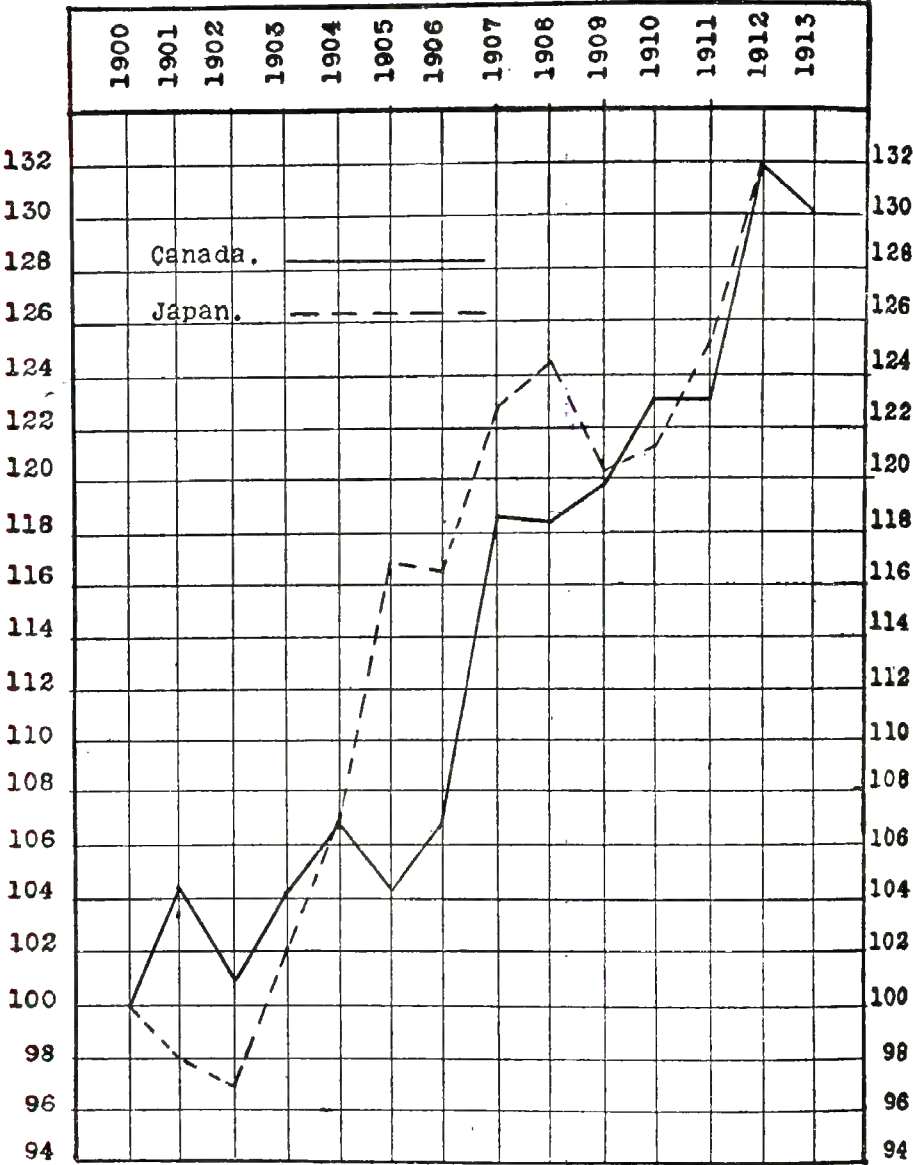
It will be noticed that although the Canadian index numbers are more buoyant in the first three years of this century, the lead was taken thereafter until 1910 by Japan. In 1912 the numbers show exactly the same degree of advance, with the Canadian numbers tending to sag.



COURSE OF WHOLESALE PRICES, CANADA AND JAPAN, 1900-1913.

Number of Articles Included, 23.

Prices in 1900=100.



## (9) NORWAY.

*Wholesale Prices.*—An index number of the Norwegian Statistical Office, which covers 39 articles, shows a rise of 9 per cent between 1900 and 1911. The food items which number 22, have gone up 17 per cent, while textiles have gone up 18 per cent.

*Retail Prices.*—A yearly budget of a typical workingclass family in Christiania has increased 17 per cent since 1901. Down to 1906 the cost of living fell off in Christiania, the increase above noted having occurred between 1909 and 1912. Rents and taxes rose only slightly, but clothing, food and fuel went up rapidly.

An index number constructed by the United Kingdom Department of Labour based on statistics compiled by the Municipal Statistical Office of Christiania shows a rise of 9 per cent in the prices of 25 principal household supplies between 1900 and 1911. Sixteen of these articles\* may be compared with similar commodities in Canada with the following result:

## TREND OF RETAIL PRICES IN CANADA AND NORWAY (CHRISTIANIA). 1900-1913.

Number of commodities, 16\*.

Prices 1900=100.

	1900	1905	1910	1911
Canada.....	100·0	110·9	129·5	138·1
Norway.....	100·0	98·4	107·4	111·0

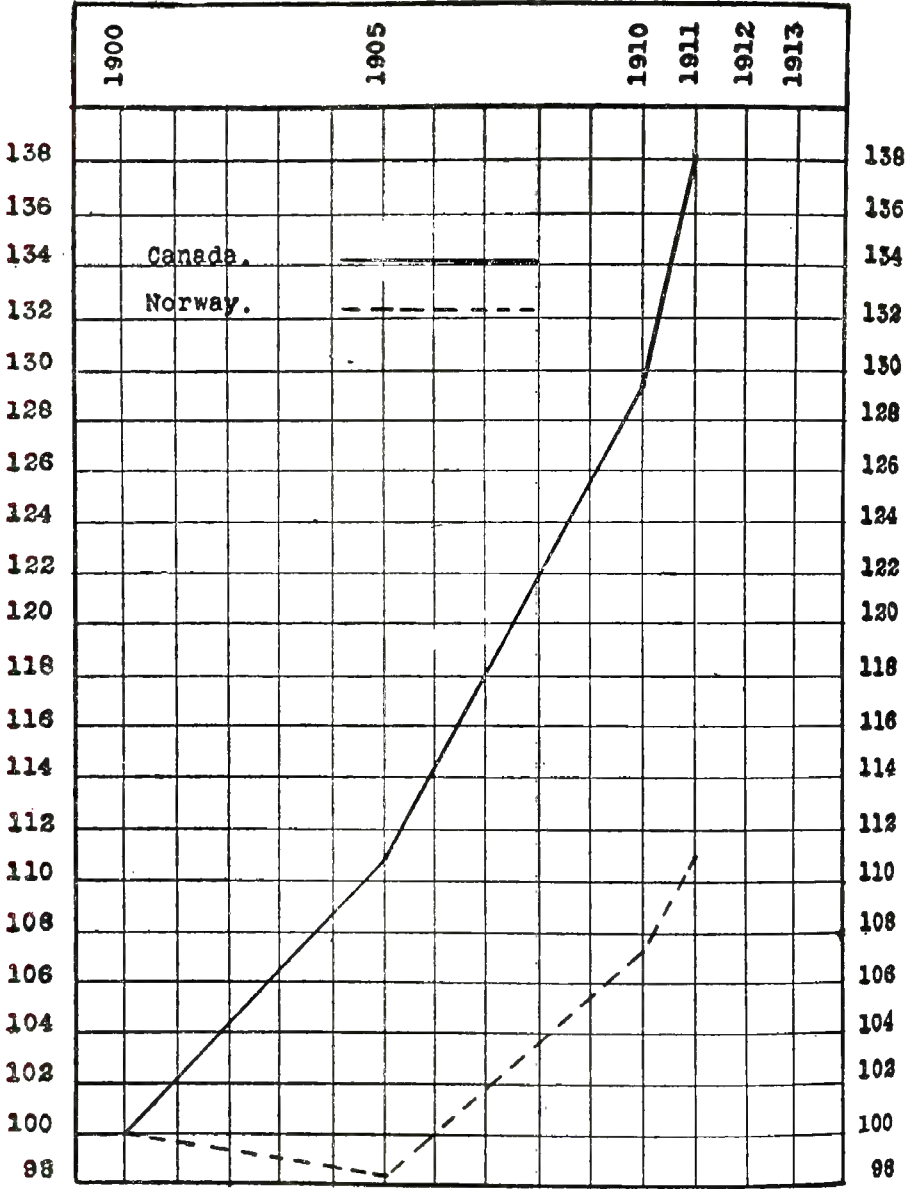
\*Namely, beef, mutton, veal, pork (salt), butter, cheese, eggs, milk, flour, beans, potatoes, coffee, sugar, petroleum, coal and wood.

Retail prices would appear to have been much more stable in Christiania than in Canada.

COURSE OF RETAIL PRICES, CANADA AND NORWAY, 1900-1913.

Number of Articles Included, 16.

Prices in 1900=100.



## (10) RUSSIA.

*Wholesale Prices.*—Two index numbers are available. The first, that of the Russian Ministry of Commerce and Industry, is for 69 articles. A general rise of 16 per cent is shown between 1900 and 1911. To this rise cereal products contributed 27 per cent, animal products 22 per cent, oleaginous products 24 per cent, textile materials 20 per cent, dyes and chemical products 14 per cent, "colonial series" 7 per cent; mineral products show a slight decline. It will be seen that the price rise has been highest in textiles, and next highest in animal products, hides and live pigs being a chief contributing factor in the latter. The second index number is one computed by the United Kingdom Department of Labour for the 30 articles of food represented in the above statistics. The rise shown between 1900 and 1911 is 20·8 per cent.

Working out a comparison of the trend of wholesale prices in Canada and Russia as based on the 44 articles\* which are common to the official statistics of both countries the following result is obtained:

## TREND OF WHOLESALE PRICES IN CANADA AND RUSSIA, 1900-1913.

Number of commodities, 44\*.

Prices 1900=100.

—	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada...	100·0	99·8	101·3	102·0	102·0	104·1	108·7	116·0	113·8	118·7	124·4	126·5	135·8	130·0
Russia...	100·0	97·7	96·4	95·6	98·4	102·9	110·5	118·0	112·4	113·1	113·0	116·4	.....	.....

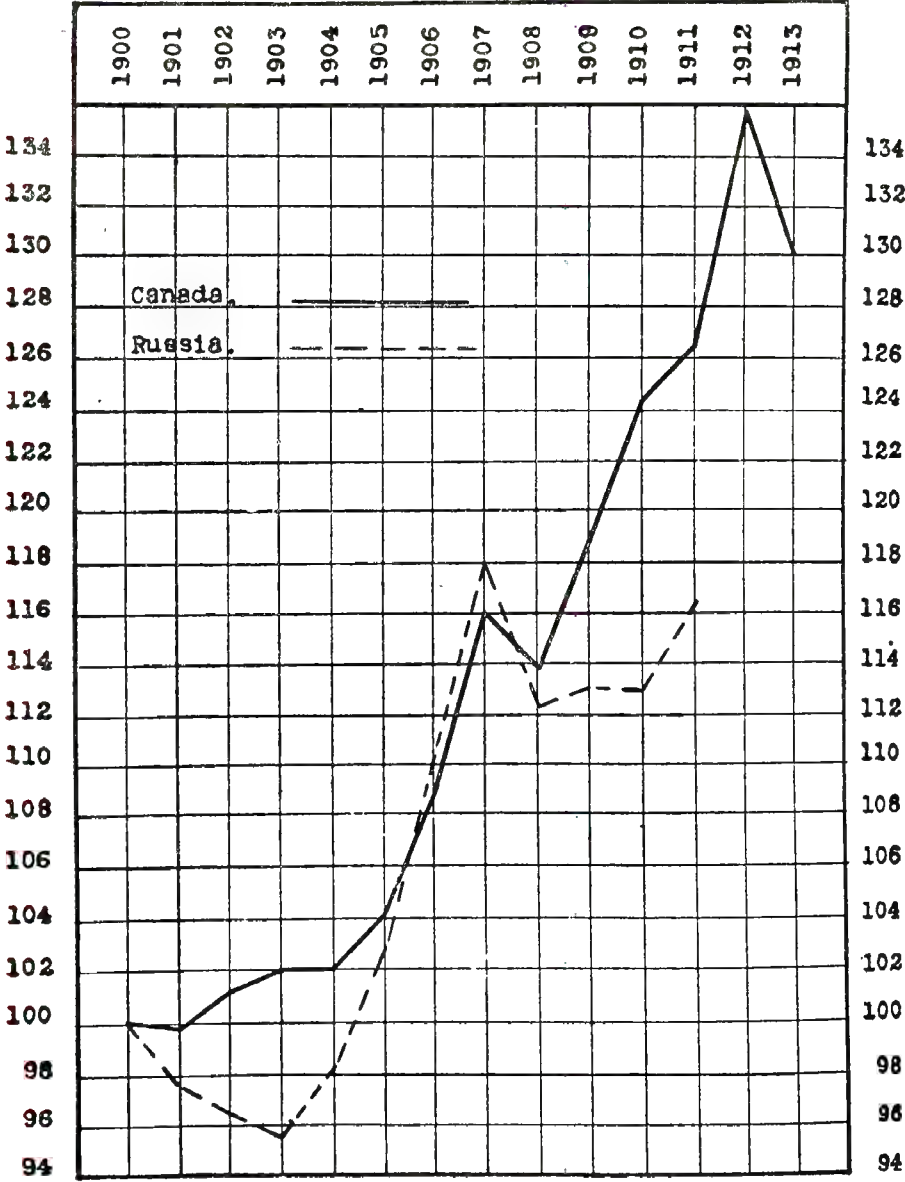
\*Namely, barley, bran, flax, oats, wheat, beef, cattle, hogs, pork, sheep, butter, fish, herrings, flour, rice, coffee, tea, sugar, pepper, salt, cotton, prints, flax fibre, hides, tallow, copper, iron pig, spelter, tin, coal, gasoline, coal oil, linseed oil, rosin, white lead, borax, caustic soda, copperas, indigo, hops, malt, corn, peas, rye, lead.

The rise in Canada has been more rapid than in Russia, though in 1906 and in 1907 the latter stood on a higher level.

COURSE OF WHOLESALE PRICES, CANADA AND RUSSIA, 1900-1913.

Number of Articles Included, 44.

Prices in 1900=100





## GENERAL SUMMARY.

## A "WORLD" INDEX NUMBER.

In summing up the preceding the first task is to present an index of the general trend of prices since the beginning of the century. As already made plain, the trend has varied considerably in different countries and in different articles and groups of articles.

The two large tables at the end of the chapter, as already explained, contain the available index numbers of the individual commodities (at wholesale and retail respectively), and these may be made the basis for a summing up of the kind desired. An average "world" index number for each commodity will be found inserted in the tables; these when combined yield the results shown on the next following page.

The results here given are unweighted, the averages being simple throughout. Those for the individual articles in the large tables accordingly tend to give prominence to price conditions in the smaller countries. As the rises, however, have been distributed with apparent evenness between the large and small countries not much would seem to be gained by the great labour of weighting each number according to population. A more serious defect is in the fact that the averages for certain commodities represent a larger number of countries than those for others. For over forty articles in the wholesale list, for example, the average is for Canada and the United States alone, where prices have been exceptionally buoyant. The above "world" numbers, therefore, might be presumed to err on the side of buoyancy.

The weighting of the various commodities, as in the preceding chapters—the wholesale by the series of group weights employed in appdx. II (p. 90) and the retail by the weights used in appdx. III. (p. 222) yields the following results:—

## "WORLD" INDEX NUMBERS OF WHOLESALE PRICES, 1900-1913.

Prices 1900=100.

No. of countries represented, 12.

No. of articles, 145.

	No. of Articles	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
I. Grains and fodders.....	11	100-0	106-9	118-7	112-8	102-1	109-8	112-1	126-1	136-0	132-5	126-9	132-3	148-6	124-3
II. Animals and meats.....	11	100-0	107-4	117-2	114-5	108-9	112-7	118-8	123-8	122-9	128-0	136-4	122-5	140-0	154-9
III. Dairy produce.....	4	100-0	101-8	107-0	106-3	102-3	108-1	109-2	114-8	119-5	121-8	122-4	123-4	138-5	134-5
IV. Fish.....	5	100-0	103-9	101-1	132-4	106-6	105-4	109-2	110-9	99-6	111-8	120-0	128-9	133-2	128-8
V. Other foods.....	24	100-0	103-0	104-9	99-3	100-1	106-4	105-2	108-6	110-3	107-8	107-7	117-7	124-1	112-8
VI. Textiles.....	14	100-0	96-1	94-8	102-4	106-1	109-5	118-9	124-4	113-8	110-7	120-6	126-9	123-4	130-1
VII. Hides, leather, boots.....	4	100-0	97-5	104-1	101-7	99-3	102-6	113-0	117-7	111-4	118-6	123-2	120-3	126-8	140-4
VIII. Metals and implements.....	14	100-0	90-6	88-0	89-9	87-9	93-7	103-7	109-1	95-3	95-1	96-5	96-6	103-7	104-3
IX. Fuel and lighting.....	5	100-0	91-2	96-8	100-3	89-5	96-5	104-9	109-4	101-3	100-3	94-8	94-7	108-7	116-6
X. Building materials.....	20	100-0	100-4	100-4	102-2	102-4	106-9	114-7	120-3	109-7	109-8	114-6	121-3	123-7	122-7
XI. House furnishings.....	9	100-0	100-4	101-0	101-2	103-6	102-4	103-0	108-3	107-3	103-5	104-3	105-5	110-3	118-8
XII. Drugs and chemicals.....	14	100-0	97-9	94-2	97-7	97-9	96-1	98-5	98-9	99-4	97-1	100-1	107-7	109-1	105-8
XIII. Miscellaneous.....	10	100-0	97-2	105-1	108-3	107-8	106-6	103-6	110-5	105-0	159-5	163-7	112-5	116-3	111-4
All.....	145	100-0	99-8	102-0	102-3	100-9	104-6	108-7	113-8	109-4	110-0	112-8	116-3	122-6	121-0

## "WORLD" INDEX NUMBERS OF RETAIL PRICES, 1900-1913.

Prices 1900=100

No. of countries represented, 12.

No. of articles, 24.

	No. of Articles	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Foods.....	21	100-0					110-3					119-7	123-1	129-4	134-6
Cool.....	1	100-0					93-2					105-8	106-1	115-0	106-8
Wood.....	1	100-0					99-2					123-9	124-6	129-7	127-4
Coal oil.....	1	100-0					89-5					90-0	89-5	90-2	90-2
All.....	24	100-00					108-3					118-1	121-1	127-2	131-6

## WEIGHTED WORLD INDEX NUMBERS, 1900-1914.

	1901	1902	1903	1904	1905	1906	1907
Wholesale.....	100.4	104.8	104.8	100.6	105.6	110.0	116.2
Retail.....					107.3		
	1908	1909	1910	1911	1912	1913	
Wholesale.....	114.1	114.0	116.4	117.7	127.0	124.4	
Retail.....			120.2	123.3	129.3	131.0	

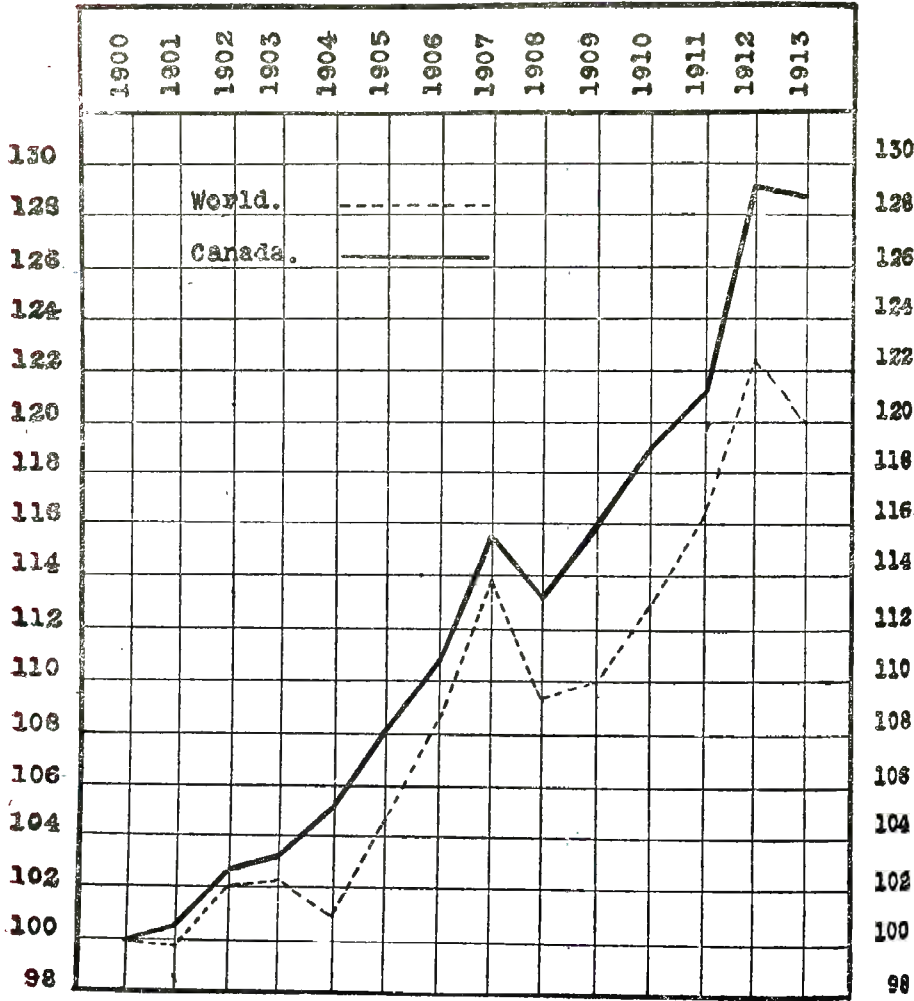
The effect of weighting the commodities, it will be seen, is to increase the buoyancy of both price lines. With regard to the wholesale line: from the fact that the groups in which the largest numbers of countries are represented in the detailed tables (viz., grains, meats, miscellaneous foods) are those to which the heaviest weights are attached, it might have been expected that the weighting process would tend to decrease any buoyancy due to the non-representative character of certain of the individual averages. This, however, is completely offset by the pronounced rises that have generally taken place in these groups. The weighting of the retail number emphasizes the rise to 1912 and the halt that was called in 1913. The experiment points to the view that the world rise is primarily a rise in foodstuffs. This, however, will be more fully analyzed further on.

The general tendency may be summed up as follows: (1) *Wholesale*—The first four years of the century saw practically level progress. With 1904, however, there set in a steady rise to 1907, when a check occurred which extended over 1908 and 1909. In 1910, 1911 and 1912 a very pronounced upward movement was recorded followed by a slight decline in 1913. (2) *Retail*—The movement was apparently more persistently upward than in the wholesale prices, the numbers being higher throughout and continuing to mount in 1913.<sup>1</sup>

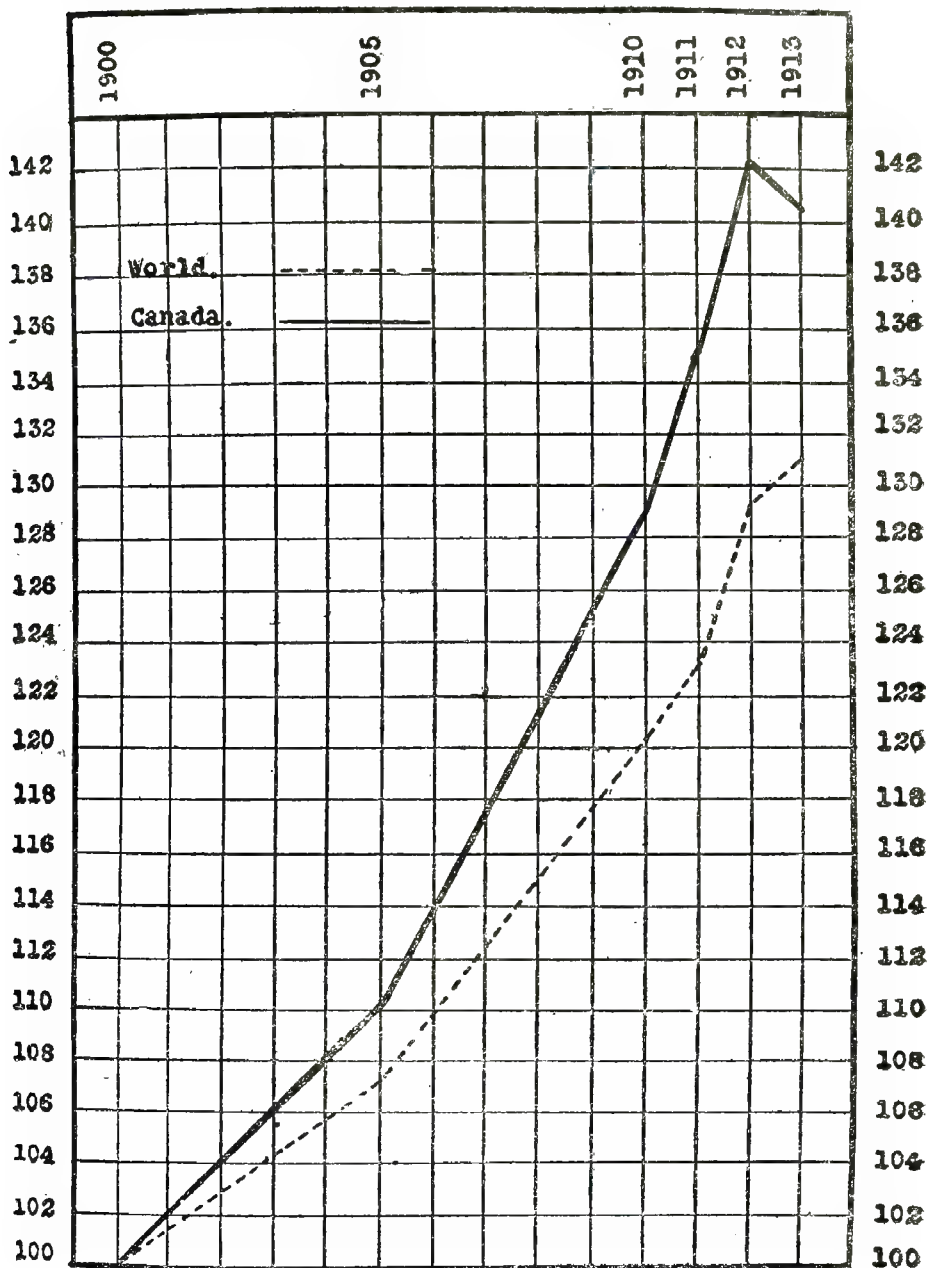
It is interesting to note the line of Canadian wholesale and retail prices in connection with this "world" movement, as in the accompanying tables and diagrams.

<sup>1</sup>This is substantially the finding of Mr. R. H. Hooker, who sums up (*The Course of Prices at Home and Abroad*, 1890-1910, in the Journal of the Royal Statistical Society, December, 1911): "The general feature of the price movement in all European countries has been a large trough during the decade 1890-99, following a maximum in 1890, with a minimum about 1896; another shorter and much less violent depression followed the 1900 maximum, while the subsequent culmination in 1907 has been followed by a dip lasting one year only, and prices have since risen rapidly, so that present (September, 1911) prices are at the highest level reached since 1883.... In America we find a precisely analogous state of affairs during the decade 1890-99, but the 1900-7 trough is entirely swamped by a general rise, and while the 1908 dip appears, the subsequent upward movement has again been sharper than on this side of the Atlantic."

COURSE OF WHOLESALE PRICES, THE WORLD AND CANADA, 1900-1913.



COURSE OF RETAIL PRICES, THE WORLD AND CANADA, 1900-1913.





## WHOLESALE PRICES, 1900-1913.

	1900	1901	1902	1903	1904	1905	1906
World.....	100.0	99.8	102.0	102.8	100.9	104.6	108.7
Canada.....	100.0	100.5	102.7	103.3	105.3	108.1	110.9
	1907	1908	1909	1910	1911	1912	1913
World.....	113.8	109.4	110.0	112.8	116.3	122.6	121.2
Canada.....	115.6	113.3	116.0	119.0	121.3	129.2	128.7

## RETAIL PRICES, 1900-1913.

	1900	1905	1910	1911	1912	1913
World.....	100.0	107.3	120.2	123.3	129.3	131.0
Canada.....	100.0	110.1	129.0	135.3	142.2	140.5

An interesting combination of wholesale price index numbers for various countries with the object of forming a world index number is that of Mr. G. H. Knibbs, C.M.G., Commonwealth Statistician of Australia (See "Prices, Prices Indexes and Cost of Living in Australia" 1912, page 76). The index numbers of the Economist, Board of Trade, and Sauerbeck for the United Kingdom, of Waxweiler for Belgium, of Schmitz and Hooker for Germany, of Necco for Italy, of various authorities for France, of the Department of Labour for Canada, of the Bureau of Labour for the United States, of McIlreith for New Zealand, and of the Commonwealth Bureau of Census and Statistics for Australia, were averaged. In combining them the following weights representing relative populations were used:

Country	United Kingdom	Belgium	Germany	Italy	France	Canada	U.S.A.	N.Z.	Australia
Weights....	45	7½	65	35	40	7	92	1	4½

The world's index number obtained in this way is as follows:

1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911
100.0	96.2	96.1	98.0	98.3	100.0	106.8	113.2	105.9	107.5	112.3	115.7

It will be seen that this is in substantial agreement with the results indicated above except that it accentuates the weakness of prices in 1901-5 and in 1908-9.

## ANALYSIS OF WORLD PRICE TENDENCIES.

This general finding as to price variations since 1900 requires analysis from two main points of view, (1) that of the countries included, and (2) that of the commodities included. The two of course are not mutually exclusive; much of the significance of the variations lies in the interplay of the two factors of locality and of commodity, as when an article rises in one country but falls in another. This, in fact, will be found to point the way to much that is explanatory of the price situation. In the first instance, however, it will be well to employ the two methods separately.

## SUMMARY OF PRICE VARIATIONS ACCORDING TO COUNTRIES.

The variations of prices in different countries has been the subject of fairly minute examination in the earlier part of the chapter and it remains only to bring together the results in summary form.

In the first place, notwithstanding the lack of common basis to the statistics, the general impression conveyed is tolerably clear. Briefly it is, that although the main changes in the direction of the price movement since 1900 may be described as synchronous in the several countries, the lesser changes are not invariably so, and the extent of the rises and falls at times differs materially.

Looking chiefly to the final results of the various changes, it is possible to classify the countries examined into three main groups according to the degree of buoyancy which their prices have shown: (1) In the group in which prices have risen least (10-20 per cent) and which lie below the average, may be placed the United Kingdom, France, Italy, Belgium, Holland, Norway and Russia. (2) Germany and Austria constitute a second group where the rise in prices has been materially greater than in the first (25-40 per cent). India, Australia and New Zealand exhibit highly individualized price movements, but on the whole may be added to this second group. (3) In the third group, that in which the rise has been most pronounced (40-50 per cent), and considerably higher than the average, fall Japan, Hungary, the United States and Canada.

## PER CENT OF WHOLESALE PRICE LEVEL IN VARIOUS COUNTRIES OF CURRENT CANADIAN LEVEL—ALL 100 IN 1900.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Canada.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
* United Kingdom.....	100.0	100.6	95.6	94.2	95.1	92.4	94.4	94.0	91.7	89.6	90.1	89.8	88.3	91.4
United States.....	100.0	98.3	102.0	100.5	99.2	96.9	100.0	101.2	97.6	99.6	100.4	98.7	95.8	93.6
Australia.....	100.0	106.0	110.5	106.0	91.9	96.0	94.5	89.4	101.0	90.9	89.2	79.7	92.1	.....
New Zealand.....	100.0	100.8	104.5	103.9	94.9	95.8	96.5	97.8	98.1	95.8	91.5	.....	.....	.....
India.....	100.0	99.9	97.4	91.7	91.2	92.5	99.8	106.8	114.5	100.7	97.1	100.8	102.8	.....
Belgium.....	100.0	102.1	93.4	92.6	96.3	95.7	94.5	85.3	81.2	84.7	.....	.....	.....	.....
France.....	100.0	96.8	95.2	94.5	95.3	93.9	94.9	92.1	93.2	93.5	94.7	94.1	.....	.....
Germany.....	100.0	94.7	91.7	90.0	92.2	91.9	95.3	96.3	92.6	88.6	87.9	92.6	92.1	92.0
Holland.....	100.0	108.2	90.7	89.8	97.5	94.7	93.6	90.9	84.9	86.9	85.8	88.9	.....	.....
Japan.....	100.0	94.0	96.1	97.8	100.5	112.1	109.3	103.5	105.1	100.4	98.6	101.9	100.0	.....
Russia.....	100.0	99.9	95.2	93.7	96.5	98.8	101.7	101.7	98.8	95.3	90.8	92.0	.....	.....

\*As no quotations for coal were available for 1913, coal is excluded throughout the Index Number, being thus purely a Food Index.

PER CENT OF RETAIL PRICE LEVEL IN VARIOUS COUNTRIES OF CURRENT  
CANADIAN LEVEL, ALL 100 IN 1900.

	1900	1905	1910	1911	1912	1913
Canada.....	100.0	100.0	100.0	100.0	100.0	100.0
United Kingdom.....	100.0	91.7	82.9	77.5	78.8	78.5
United States.....	100.0	101.8	103.1	95.5	101.6	102.4
Australia.....	100.0	91.3	83.2	78.4	84.5	.....
Austria.....	100.0	97.5	101.0	94.6	93.8	.....
Hungary.....	100.0	102.0	101.4	102.7	.....	.....
Belgium.....	100.0	97.7	90.7	87.2	89.1	.....
Prussia.....	100.0	99.4	92.1	89.7	.....	.....
Bavaria.....	100.0	98.4	91.6	89.4	.....	.....
Baden.....	100.0	96.5	93.4	90.3	89.9	.....
Wurtemberg.....	100.0	99.0	98.5	93.1	.....	.....
Holland.....	100.0	96.2	96.3	93.7	97.6	.....
Norway.....	100.0	88.7	82.9	80.4	.....	.....

INDEX NUMBERS OF CHANGES IN THE LEVEL OF FOOD PRICES SINCE THE YEAR 1900 IN THE UNITED KINGDOM AND CERTAIN FOREIGN COUNTRIES AND BRITISH DOMINIONS OVERSEA

(1900=100.)

Country.	Nature of Index Number.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912
United Kingdom.....	Retail prices of 23 articles of food in London, weighted, according to workmen's consumption.....	100	100	101	103	102	103	102	105	108	108	109	109	115
Foreign Countries:— Austria-Hungary:														
(a) Austria.....	Retail prices of 14 articles of food in Vienna (unweighted).....	100	100	99	101	105	108	113	113	118	120	126	128	135
(b) Hungary.....	Retail prices of 48 articles of food in 22 principal towns (unweighted).....	100	101	102	103	111	122	118	122	128	131	129	137	..
Belgium.....	Retail prices of 11 articles of food in 16 principal towns, weighted according to workmen's consumption.....	100	101	102	113	109	110	112	115	116	120	122	128	132
France.....	Retail prices of 24 articles of food (including wine), fuel and lighting materials in Paris, weighted according to workmen's consumption.....	100	100	95	98	99	97	95	100	102	100	104	117	115
Germany.....	Retail prices of 13 articles of food in Prussia, Bavaria, Baden and Wurtemberg, weighted according to workmen's consumption.....	100	103	106	105	105	114	118	116	116	124	127	128	137
Holland.....	Retail prices of 23 articles of food in 6 principal towns (unweighted).....	100	100	100	102	103	102	103	105	107	109	115	117	123
Italy.....	Contract prices of 13 articles of food supplied to 43 State colleges in various parts of the country (unweighted).....	100	100	99	99	97	99	99	101	105	112	114	118	120
Norway.....	Retail prices of all articles of food (26 specified) in Christiania, weighted according to workmen's consumption.....	—†	100	99	99	97	100	103	108	109	106	108	111	119
Russia.....	Wholesale prices of 30 articles of food at representative markets (unweighted).....	100	104	107	102	104	112	116	130	127	116	121	.....	.....



United States.....	Retail prices of 15 articles of food in 39 principal cities, weighted according to workmen's consumption.....														
Japan.....	100	105	111	111	113	113	117	122	126	133	140	139	150		
British Dominions:—															
Canada.....	Wholesale prices of 20 articles of food in 19 to 25 towns (unweighted).....														
	100	97	100	108	120	132	127	134	136	132	132	138			
Australia.....	Wholesale prices of 75 articles of food (including fodder) at representative markets, weighted according to national consumption.....														
	100	104	109	106	109	111	115	128	129	133	135	136	151		
New Zealand.....	Retail prices of 41 articles of food (beside soap, starch, washing blue, kerosene and candles) in the 6 capital cities, weighted according to national consumption.....														
	—†	100	109	105	95	101	101	98	106	104	103	103	116		
	Wholesale prices of 17 articles of food at representative markets (unweighted).														
	100	101	109	109	102	107	107	112	117	108	110	116			

†Data for the year 1900 are not available.

This, as above stated, is by way of rough interpretation of the preceding figures. For more precise comparisons between the various countries *inter se*, the discrepancies in the statistics offer considerable difficulties. The method pursued above of instituting a series of comparisons between Canada and each of the countries in turn shifts the basis in each case and does not directly allow a general point of view. This, however, may be obtained by bringing together the figures of variation between the price rise in Canada and that in the several countries from year to year. In the accompanying tables, the figures show the per cent which the price level in each country is of the current level in Canada, both having started even at 100 in 1900.

A recent valuable estimate of the different extent to which prices have risen in different countries is that of the United Kingdom Board of Trade in its report on "Cost of Living of the Working-classes, 1912."<sup>1</sup> The comparison is limited to food prices, the purposes being in the first instance to portray the rise in the cost of living. The method followed was to combine the food prices contained in the official index numbers of the several countries and to present the results side by side. Though the criticism of this method is possible that the results are obtained for the different countries by quite different methods (the result for the United Kingdom, for example, being based on the retail prices of 23 articles of foods in London weighted according to workmen's consumption, whereas that for Canada is based on the wholesale prices of 78 articles at primary markets weighted by a series of group weights), it is undoubtedly a valuable index.

The table is given herewith with additions and revisions for which acknowledgements are due to the Board of Trade. The figures are in general accordance with the analysis already given. In 1911, the last year for which the table is complete, Canada stands fourth from the top of the list, at a small interval below the United States, Japan and Hungary. In 1912, with two of the three high countries unrepresented, Canada stands first on the list in close proximity to the United States.

COMPARISON OF ACTUAL PRICES.

As an addendum on actual living costs, as between certain countries, the findings of the United Kingdom Board of Trade, the only authority which has recently investigated the comparative level of the cost of living in different countries on a comprehensive scale may be cited from the series of reports already mentioned.<sup>2</sup> The conclusions of the Board of Trade are expressed with caution, and are intended to show tendencies rather than to give exact ratios; but in general it was found that the level of the cost of living is much higher in the United States than in the other countries investigated, namely, the United Kingdom, France, Germany and Belgium. The comparison is given as follows, prices in the United Kingdom being represented as 100:—

Country.	Number of Towns.	Retail Prices.	Average Expenditure on Food, Fuel and Housing.
United Kingdom.....	88	100	100
France.....	30	118	110
Germany.....	33	118	119
Belgium.....	15	99	94
United States.....	28	138	.....

<sup>1</sup> See foot-note, p. 228.  
<sup>2</sup> See foot-note, p. 228.

Supplementary to the above, an estimate of the same kind made by the Economic Commission of South Africa in 1913 may be quoted. The following table is based on a budget which includes sugar, butter, potatoes, bread, flour, meat and milk:—

RELATIVE COSTS OF FOOD IN SOUTH AFRICA AND ABROAD.

	Relative costs of Food according to the South African Standards of Living.	Relative costs of Food according to Standards of Living in Countries mentioned.	Mean.
Witwatersrand.....	100	100	100
South Africa.....			90
United Kingdom.....	66	62	64
France.....	78	65	72
Germany.....	79	61	70
Belgium.....	68	53	61
United States of America.....	84	82	83
Canada.....	84	85	85
Australia*.....	67	68	68
New Zealand*.....	61	62	62

\*The figures in these lines are too low.

## PRICE VARIATIONS ACCORDING TO COMMODITIES.

Turning to the second point of view, that of the analysis by commodities: the table of wholesale group indices already given (page 322) in conjunction with the large tables themselves will be found to throw considerable light on where the chief factors in the rise have operated. It is apparent at a glance in the table on page 322 that farm products have led the advance. Animals and meats, grains and fodder and dairy produce stand first in 1912-1913 in the order named, followed by the associated group of hides and leather. Fish comes next, followed by building materials and textiles (cotton and jute), with miscellaneous food products on a somewhat lower plane. Metals, fuel, house-furnishings, and drugs all show rises of less than 15 per cent, the first-mentioned showing little rise at all.

Among articles that show extreme rises at wholesale may be mentioned resin, potatoes, onions, opium, hay, malt, peas, mackerel, hops, wheat, shorts, lard, eggs, hides, cattle, bran, jute, corn, tin, hogs, beef, straw, cod, oak, coffee. The articles which have advanced most rapidly at retail are beans, potatoes, pork, lard, veal, bacon, eggs, mutton, beef, butter.

Two highly important generalizations to be added to the above are (1) a comparison of the world rise in foods as opposed to materials, and (2) a comparison of the rise in raw materials as compared with that in manufactured products. Index numbers combining all the data in the large tables follow:—

—	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Foods.....	100.0	104.3	110.0	106.9	103.6	108.5	109.9	115.5	117.0	117.9	119.3	123.4	134.0	125.8
Materials.	100.0	96.7	97.1	99.2	99.2	102.0	108.0	112.8	105.2	104.5	108.5	111.3	114.7	117.8

	1900	1911	1912	1913
Raw materials.....	100.0	124.4	135.5	130.4
Manufactured products.....	100.0	113.2	117.2	118.4

The above bears out the conclusion already apparent that the rise of the past few years has been more than half again as great in foods as in materials, and more than a third again as great in raw products as in manufactured articles. It is clearly in food production and in the primary processes of production generally that the chief factors causing the rise have been at work.

It is, however, as already remarked, in the observation of the variations of these tendencies in different countries that their true significance is apt to be revealed. In the following table will be found the "food" and "materials" index numbers respectively for nine countries, obtained by averaging in each case all the data contained in the large tables.<sup>1</sup>

<sup>1</sup> Mr. Hooker's tables in the article already quoted (see footnote, pp. 229 and 323), are of interest in connection with this table. The figures, of course, come only to 1910-1911, since when there has been a pronounced rise in foods, and they cannot be directly compared with the above owing to the difference in base.

#### MATERIALS.

	United Kingdom. (Sauerbeck)	France.	Germany.	United States	Canada.
Average 1890-1899.....	100	100	100	100	100
Average 1900-1909.....	119	127	123	124	116
Average, 1910.....	127	138	132	137	123
Average, September, 1911.....	128	143	137	.....	.....

#### FOODS.

	United Kingdom. (Sauerbeck)	France.	Germany	United States	Canada
Average 1890-1899.....	100	100	100	100	100
Average 1900-1909.....	101	96	108	117	112
Average 1910.....	108	101	125	134	128
Average, September, 1911.....	114	115	142	.....	.....

## THE COURSE OF FOODS AND MATERIALS, 1900-1912.

Country.	FOODS.		MATERIALS.	
	No. of Articles.	Index No. 1911-1912.	No. of Articles.	Index No. 1911-1912.
Canada.....	59	132.7	75	111.2
United Kingdom.....	22	110.0	25	109.8
United States.....	45	129.4	08	108.9
Australia.....	35	109.8	13	97.4
New Zealand.....	22	105.2	11	95.4
France.....	16	127.1	21	112.1
Germany.....	17	121.8	15	107.5
Russia.....	20	114.5	17	112.3
Japan.....	10	139.7	11	115.3

## SIGNIFICANCE OF DATA ON COMPARATIVE PRICE MOVEMENTS.

To attempt an interpretation here of the comparative price movements above described from a casual standpoint would be to anticipate much necessary data to be given hereinafter. It is, however, of interest even thus early to note certain features that pave the way to explanations.

It is, of course, well known that prices are one of a group of economic phenomena,—including trade, finance, unemployment, the marriage-rate—that tend to move together, indicating “prosperity” on the one hand, or “depression” on the other according to the direction taken. There has been a general rise in prices since 1900, but so likewise has there been, as is well-known, a general buoyancy of trade and industry. The world, as a whole, has seen “good times” during the past decade, and it is a natural presumption (recalling the discussion on this point in the introduction appdx. I, p. 82, to associate the price-rise with that fact.

This connection is further established when it is pointed out that the price-rise has differed in different countries very much according to what is known to have been the general economic trend and the general intensity of the conditions just described as constituting “good-times.” In countries where that trend has shown only a moderate degree of change, prices have exhibited corresponding steadiness. Where, however, there has been great buoyancy in any particular direction, with consequent displacements or readjustments, prices have gone up very rapidly. For example, in Great Britain, France and Italy, where economic progress since 1900 has been that of normal prosperity, the line has moved with corresponding slowness. Where, as in Germany, there has been a more rapid process of industrial expansion, the price line has been more rapidly upward. Finally where, as in Canada and the United States, this development has attained extraordinary proportions, the highest rise in the line is found.

It is, however, in the examination of the price-rise in different commodities, and particularly as between the two broad groups of foods and materials that confirmation of the above is found. That foods in general have risen more rapidly than materials is a symptom of an era of exploitation and expansion. Such an era, though it creates a very marked demand for materials, and thus tends to raise their price, provides with almost equal celerity for an increase in their supply. It does so, however, at the expense of diverting effort from food production and foods in consequence show a diminution in supply at a period when, to a certain extent at least, the “good-times” allow of increased consumption. An increase in food production, apart from the diversion just mentioned, is of course, necessarily a slower process than an increase in the supply of materials. Moreover, the food supply is a local concern to a degree that the supply of materials is not. A harvester may be shipped around the world and be con-



tracted for months in advance. Food supplies are much more difficult to handle thus, with the result that when a local source fails a considerable rise in price is almost invariably entailed. The same reasoning applies within limits to the groups of raw and manufactured articles.

Finally, when we turn from a general statement of this kind to the record of variations in foods and materials in the different countries set forth in the table on page 334 the most striking fact of all appears. It is precisely in the countries where the general buoyancy has been greatest that food prices have risen the most. In general, the rise in materials has been about the same as in the leading countries, averaging, in fact 110.4 for the European countries and 110.5 for Canada and the United States. Foods on the other hand average 131.0 in America, compared with 110.0 in England, 114.5 in Russia and 121.8 in Germany. The figure 127.1 for France looks like an exception to the rule, but as this represents import values only, it is not to be pressed. In other words, the high price lines of countries where expansion has been most in evidence reflects a rise in food prices due to that expansion.

One of the most striking of recent developments in Canada and the United States is the rapid decline in food exports, leading in some cases to importations. England who for years has drawn her chief foods from abroad has seen little change in the method of supply.

The conclusion then is that, whatever the ultimate cause which set the world process in motion, a large part of the task of tracing causes in Canada lies in an analysis of the expansion through which she has passed since 1900.

WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900—1913.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<b>I. Grains and Fodders—</b>															
<b>Barley—</b>															
Canada.....	Western.....	100.0	108.6	105.4	88.8	110.2	104.2	114.8	138.3	135.8	144.2	129.8	174.4	160.1	126.0
Canada.....	No. 2 Ontario.....	100.0	108.6	116.7	107.6	89.6	108.3	120.3	144.8	147.7	145.2	131.9	170.8	194.8	135.4
United Kingdom.....	British.....	100.0	101.0	103.0	91.3	89.6	97.7	97.0	100.7	103.7	107.7	92.6	109.4	123.1	109.4
United Kingdom.....	Foreign.....	100.0	93.4	93.7	90.1	87.4	93.0	94.4	110.8	111.6	109.8	97.7	111.6	129.5	119.2
United States.....	By sample.....	100.0	122.2	131.3	114.1	110.1	100.8	106.2	159.1	152.3	140.0	143.0	229.0	211.6	144.2
Australia.....	Malting.....	100.0	97.8	133.3	135.6	102.2	117.8	136.4	135.8	147.7	117.1	122.1	142.1	177.6	
New Zealand.....		100.0	81.2	111.8	111.8	96.4	131.8	132.9	129.4	177.6	123.5	156.5			
India.....	Certain principal stations.....	100.0	74.1	73.0	70.1	59.2	73.0	88.5	93.7	125.3	94.8	76.4	75.3	96.0	
Belgium.....		100.0	95.4	96.4	92.8	91.2	98.2	101.3	109.1	108.2	107.1				
Holland.....		100.0	109.3	100.6	100.4	102.0	110.5	114.8	140.0	120.7	125.5	106.5	128.4		
France.....		100.0	102.2	103.3	94.9	84.3	102.4	91.9	96.4	100.3	101.9	88.4	97.5		
Germany.....		100.0	102.0	99.0	96.0	98.0	105.0	107.0	119.0	123.0	117.0	107.0	126.0	134.0	112.0
Japan.....		100.0	96.0	94.0	130.0	151.0	139.0	97.0	115.0	130.0	119.0	111.0	130.0	179.0	
Russia.....		100.0	95.9	97.0	89.8	86.6	101.7	105.6	131.5	128.5	118.8	100.7	124.3		
Average.....		100.0	98.5	104.1	106.2	98.2	106.8	107.9	123.0	130.3	118.2	113.2	137.2	158.1	124.7
<b>Bran—</b>															
Canada.....		100.0	93.9	119.4	158.8	113.4	104.5	123.9	147.6	157.7	167.7	157.3	169.2	181.3	152.1
Australia.....		100.0	103.9	153.9	128.9	77.6	105.3	103.9	110.5	150.0	110.5	114.5	121.1	143.7	
Russia.....	(Moscow).....	100.0	104.6	114.9	96.6	105.1	123.4	130.0	154.3	144.9	137.5	126.6	138.2		
Average.....		100.0	100.8	129.4	128.1	98.7	111.1	119.3	137.5	150.9	138.6	132.8	142.8	164.2	137.8
<b>Corn—</b>															
Canada.....	No. 3 Yellow.....	100.0	107.7	134.2	117.2	118.5	116.6	117.9	132.0	165.3	158.1	142.5	135.8	165.4	145.7
United Kingdom.....	(Maize).....	100.0	105.9	115.8	109.5	105.1	115.2	108.1	120.2	135.0	135.4	122.2	122.0	136.0	123.1
United States.....	Cash.....	100.0	130.3	156.6	120.9	132.3	131.4	121.5	138.5	179.6	175.2	152.4	155.1	179.9	164.0
Australia.....	(Maize).....	100.0	103.3	116.7	116.7	84.2	105.8	130.0	126.7	170.0	157.5	105.8	110.4	163.3	
Holland.....	(Maize).....	100.0	108.4	123.7	109.1	105.4	115.2	106.7	122.2	136.3	134.0	119.1	123.8		
France.....		100.0	112.8	111.3	111.3	107.1	112.0	116.5	124.1	128.7	133.8	113.7	126.7	143.0	122.3
Germany.....	(Maize).....	100.0	103.0	113.0	103.0	105.0	112.0	116.0	127.0	136.0	135.0	123.0	123.0		
Russia.....	(Maize).....	100.0	95.9	97.8	91.8	103.4	127.2	93.3	108.8	125.2	123.7	107.1	109.5		
Average.....		100.0	108.4	128.2	109.9	107.5	118.0	113.8	124.9	147.0	144.1	123.2	125.8	154.4	137.3

## WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
I. Grains and Podders —(continued)	Canada.....	100-0	99-9	92-6	64-5	68-3	73-8	65-9	75-8	71-5	85-0	126-9	136-8	105-2	70-5
	United Kingdom.....	100-0	101-2	98-8	76-4	64-8	73-6	82-4	84-8	83-2	88-8	121-6	135-6	122-4	88-0
	United States.....	100-0	100-1	92-7	64-6	68-4	73-8	68-0	74-1	96-5	140-0	147-4	115-0	80-9	
	India.....	100-0	109-9	105-6	81-7	64-8	71-8	89-4	91-5	96-5	123-9	140-8	138-7		
	Belgium.....	100-0	120-7	98-1	78-8	85-3	101-3	88-5	88-5	90-5	113-4				
	France.....	100-0	112-9	116-1	80-7	80-7	90-3	112-9	100-0	106-5	135-5	141-9			
	Russia.....	100-0	117-2	101-3	82-0	78-6	79-8	89-3	91-0	84-3	111-1	132-8	129-8		
	Average.....	100-0	108-8	100-2	75-5	73-0	80-6	85-2	86-5	89-9	114-0	138-4	136-6	108-2	75-2
	Hay—														
	Canada.....	100-0	112-6	100-0	110-1	102-4	93-6	106-8	161-2	147-2	136-6	143-0	136-7	131-1	147-4
Oats—	United States.....	100-0	110-9	109-0	107-5	101-4	97-3	112-1	146-4	106-7	116-3	149-3	170-0	176-5	138-6
	Australia.....	100-0	159-6	185-0	195-9	119-9	129-0	131-7	156-9	230-1	142-9	145-7	165-2	200-1	
	Japan.....	100-0	121-1	117-1	123-1	148-1	137-1	135-1	140-1	148-1	142-1	152-1	154-1	154-1	
	Average.....	100-0	126-0	127-8	134-1	117-9	114-2	121-4	151-1	158-0	134-5	147-5	156-5	177-9	142-3
	Canada.....	100-0	117-5	106-7	91-5	105-5	105-7	98-7	116-7	114-9	117-4	101-5	106-3	118-8	98-4
	No. 2 White Western.....														
	No. 2 White Ontario.....	100-0	124-2	150-9	117-7	121-3	141-9	134-3	163-2	167-1	169-9	134-1	145-5	173-8	139-4
	British.....	100-0	104-7	114-7	97-6	92-9	98-6	104-3	107-1	101-4	107-6	98-6	107-1	122-3	108-5
	United Kingdom.....	100-0	108-4	122-1	100-6	101-5	105-8	113-8	123-8	111-9	117-1	105-8	113-2	133-0	130-0
	Foreign.....	100-0	140-0	174-3	155-8	160-7	131-6	144-5	198-1	224-3	211-7	169-8	169-5	192-8	165-4
Peas—	United States.....	100-0	100-9	140-3	118-5	81-5	95-4	119-5	118-5	129-6	98-1	106-5	105-5	142-6	
	Australia.....	100-0	111-9	153-6	125-0	95-2	108-3	121-4	161-9	162-4	94-0	115-5			
	New Zealand.....	100-0	107-5	110-5	89-2	84-1	90-7	99-1	96-7	101-5	101-2	91-2	95-2		
	France.....	100-0	101-5	109-6	90-2	93-0	108-0	108-9	113-9	108-2	131-9	109-3	117-0	140-1	118-1
	Belgium.....	100-0	107-6	108-9	95-5	99-5	107-6	113-1	117-3	105-5	113-0	109-3	117-0		
	Holland.....	100-0	105-1	113-1	97-0	96-1	106-1	119-1	130-1	119-1	124-1	111-1	125-1		
	Germany.....	100-0	105-1	113-1	97-0	96-1	106-1	119-1	130-1	119-1	124-1	111-1	125-1		
	Russia.....	100-0	115-4	127-5	100-1	100-3	113-3	118-4	143-0	124-3	128-4	109-0	122-6		
	Southern market.....														
	Average.....	100-0	111-7	128-5	107-5	102-1	108-7	117-0	133-5	131-3	125-8	114-7	121-2	143-7	120-4
Peas—	Canada.....	100-0	114-9	131-7	111-0	107-8	117-5	132-0	136-2	147-2	148-5	133-9	145-7	189-8	169-9
	Australia.....	100-0	105-3	127-8	128-1	81-0	106-6	112-0	108-1	119-6	137-6	147-7	119-6	123-4	

Belgium.....	100.0	102.6	113.0	113.2	115.8	124.1	131.2	121.0	136.1	100.9	136.3	
Russia.....	100.0	107.2	117.8	108.4	98.7	102.6	116.2	124.1	122.7	122.7	100.9	136.1
Average.....	100.0	107.5	122.6	115.2	100.2	110.6	121.1	122.2	136.2	120.9	137.4	160.5
Rye—												
Canada.....	100.0	99.3	107.5	102.7	120.5	134.6	134.9	141.7	143.7	134.9	143.5	173.8
United States.....	100.0	103.0	104.9	99.6	138.8	137.4	118.0	148.5	151.2	150.2	147.2	154.2
Belgium.....	100.0	95.5	94.9	94.5	96.3	102.6	104.2	116.5	119.1	115.7	111.7	127.2
Holland.....	100.0	94.3	99.4	97.3	97.3	105.5	107.6	129.2	128.1	117.5	102.7	122.9
France.....	100.0	98.8	98.6	93.6	92.9	101.6	100.0	103.2	103.0	95.8	102.1	121.8
Germany.....	100.0	99.0	100.0	94.0	93.0	101.0	110.0	131.0	127.0	104.0	116.0	135.4
Russia.....	100.0	97.9	102.5	98.1	100.8	115.7	114.4	148.7	156.7	112.4	123.3	146.3
Average.....	100.0	98.3	101.1	97.1	105.4	114.9	112.7	131.3	135.2	116.7	124.8	138.3
Shorts—												
Canada.....	100.0	98.2	123.6	113.6	123.3	114.7	122.7	143.8	149.6	149.0	159.0	173.9
Australia.....	100.0	95.3	143.0	132.6	70.9	104.7	95.3	101.2	138.4	101.2	107.0	141.9
Average.....	100.0	96.8	133.3	123.1	97.1	109.7	109.0	122.5	144.0	125.1	133.0	157.9
Straw—												
Canada.....	100.0	108.9	106.1	103.8	121.4	121.6	120.6	158.6	166.0	147.1	132.3	204.1
Australia.....	100.0	102.8	151.5	163.2	88.0	97.1	104.9	119.1	175.6	128.2	102.3	114.6
Belgium.....	100.0	171.2	144.0	106.2	123.9	144.8	128.6	136.9	119.4	133.0	111.0	125.0
Japan.....	100.0	83.0	89.0	107.0	107.0	104.0	104.0	104.0	107.0	111.0	114.0	125.0
Average.....	100.0	119.0	122.7	120.0	109.8	116.9	114.5	129.7	142.0	123.7	118.6	148.6
Wheat—												
Canada.....	100.0	100.8	97.7	105.6	122.9	121.2	102.0	118.1	139.5	134.2	128.2	130.7
No. 1 Northern.....	100.0	100.5	110.8	111.7	143.7	140.3	115.6	127.2	137.2	148.9	128.0	144.8
No. 2 White Ont.....	100.0	99.4	104.3	99.4	105.3	110.2	105.0	113.6	118.9	117.6	117.6	129.1
United Kingdom.....	100.0	97.4	98.4	99.9	103.1	106.3	103.4	113.1	123.5	123.4	116.8	124.7
Foreign.....	100.0	102.1	112.2	112.2	147.6	143.5	112.7	129.0	170.4	155.9	140.0	149.1
United States.....	100.0	99.3	153.7	185.9	113.8	121.6	115.7	134.3	149.3	164.2	126.1	146.3
Australia.....	100.0	101.4	147.1	174.2	131.4	131.4	134.2	157.1	192.9	171.4	152.9	195.5
New Zealand.....	100.0	95.5	85.6	78.4	77.5	82.0	106.3	100.0	148.6	109.9	92.8	95.5
India.....	100.0	100.3	100.7	100.1	106.8	108.4	104.5	115.1	120.4	136.3	125.5	143.2
Belgium.....	100.0	101.7	101.4	102.4	113.4	118.6	111.2	124.9	125.4	123.0	125.5	143.2
Holland.....	100.0	100.0	97.1	95.1	97.4	105.7	99.1	110.6	130.0	126.0	130.0	138.0
France.....	100.0	107.0	107.0	102.0	111.0	111.0	114.0	132.0	148.0	132.0	130.0	127.0
Germany.....	100.0	90.0	91.0	120.0	121.0	130.0	112.0	127.0	131.0	136.0	130.0	145.0
Japan.....	100.0	98.4	95.2	97.3	104.5	112.1	113.2	133.7	143.1	134.4	128.6	137.0
Russia.....	100.0	99.6	107.5	114.7	113.5	116.9	111.3	125.0	138.6	133.1	126.4	126.9
Average.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<i>II. Animals and Meats.</i>															
Bacon—															
Canada.....	English boneless breakfast bacon, pork and ham.....	100-0	119-2	120-3	118-2	106-7	117-6	133-9	123-4	120-3	127-7	157-2	131-0	138-6	160-7
	United Kingdom.....	100-0	112-8	126-4	126-5	112-8	111-3	126-6	132-5	122-0	143-0	166-1	142-3	150-5	171-9
	United States.....	100-0	118-5	142-7	127-6	103-1	106-4	125-3	126-8	119-9	156-0	177-1	126-2	147-2	169-4
	Australia.....	100-0	109-4	133-9	137-7	115-0	98-1	103-7	116-9	132-0	128-3	118-8	101-8	135-2	
	New Zealand.....	100-0	110-0	124-4	152-2	123-3	123-3	130-0	130-0	153-9	150-0	136-7			
	Average.....	100-0	114-0	129-5	132-4	112-2	111-3	123-9	125-9	130-6	141-0	151-2	123-2	145-0	165-9
<i>Beef—</i>															
Canada.....	Dressed hind- quarters.....	100-0	104-3	115-9	105-7	107-1	106-1	110-0	118-2	129-6	152-2	185-6	179-3	209-8	208-2
	United Kingdom.....	100-0	94-8	101-7	96-6	94-8	94-8	94-8	96-6	98-3	101-7	105-2	101-7	113-8	110-3
	United States.....	100-0	97-9	120-7	97-5	101-7	99-8	97-0	110-0	116-1	118-0	128-0	122-2	159-8	155-7
	Australia.....	100-0	138-4	143-1	130-8	107-2	96-8	137-9	120-9	130-2	105-9	91-0	86-6	116-0	
	New Zealand.....	100-0	115-2	124-8	140-9	117-1	107-6	112-4	117-1	119-0	104-8	122-8			
	Belgium.....	100-0	101-5	106-4	115-5	113-4	107-1	116-4	119-0	115-5	110-5				
	Holland.....	100-0	102-4	109-1	111-3	107-4	105-9	109-1	112-6	109-6	113-5	118-6	127-0		
	Japan.....	100-0	107-0	106-0	115-0	120-0	154-0	155-0	161-0	168-0	147-0	135-0	132-0	136-0	
	Russia.....	100-0	100-8	104-3	105-1	103-9	112-3	111-0	127-1	138-8	136-4	133-1	130-2		
	Average.....	100-0	106-9	114-7	113-2	108-1	109-4	116-1	120-3	125-0	121-1	125-8	123-4	150-1	149-8
<i>Cattle—</i>															
Canada.....	Av. western prime and choice steers Toronto.....	100-0	106-1	115-1	105-8	105-4	104-5	107-8	119-8	116-4	126-1	143-4	142-1	162-8	176-7
	United States.....	100-0	104-8	125-8	95-1	99-6	99-9	102-7	110-4	114-5	123-3	132-3	125-0	153-8	156-2
		100-0	103-4	103-4	117-2	115-5	117-2	112-1	115-5	120-7	120-7	127-9	137-9		
	to extra & steers good to choice.....	100-0	98-0	102-0	109-0	111-0	115-0	124-0	123-0	116-0	111-0	122-0	129-0	139-0	145-0
	(Oxen).....	100-0	102-1	103-9	102-2	105-6	112-6	109-1	135-2	137-7	141-5	138-0	134-2		
	(Horned cattle...).....	100-0	102-9	110-0	105-9	107-4	109-8	111-1	120-8	121-1	124-5	134-7	133-6	155-6	161-4
	Average.....	100-0	102-9	110-0	105-9	107-4	109-8	111-1	120-8	121-1	124-5	134-7	133-6	155-6	161-4



Hams— Canada..... United States..... Australia.....	City cured, medium.....	100-0	111-8	108-5	108-9	97-3	102-1	117-6	119-2	113-7	119-3	147-6	128-2	131-7	155-7
	Smoked.....	100-0	104-8	118-1	124-0	104-5	102-0	120-4	127-1	109-7	127-9	160-4	136-4	139-3	162-1
		100-0	105-7	128-9	126-0	118-8	111-5	111-5	124-6	133-2	140-5	142-0	132-9	156-5	.....
	Average.....	100-0	107-4	118-5	119-6	106-9	105-2	116-5	123-6	118-9	129-2	151-0	132-5	142-5	167-2
Hogs— Canada..... United States..... France..... Holland..... Germany..... Russia.....	Selects.....	100-0	116-2	113-7	101-2	88-3	108-0	118-2	111-8	102-5	126-7	147-3	114-9	133-6	156-4
	Light.....	100-0	115-7	131-7	118-4	100-7	104-1	123-7	121-5	110-2	143-9	176-1	131-6	147-6	165-4
		100-0	95-8	102-1	110-6	94-8	105-3	115-8	142-1	139-0	136-9	142-1	144-3	.....	.....
	(Pigs) (Live pigs).....	100-0	114-3	118-5	105-5	100-6	126-2	129-5	121-2	115-7	124-8	137-8	129-5	.....	.....
Lard— Canada..... United States..... Australia..... Germany.....	Pure.....	100-0	116-0	124-0	102-0	102-4	109-7	123-3	135-0	140-7	144-7	141-6	118-5	153-0	152-0
		100-0	93-9	104-1	106-8	102-4	109-7	123-3	135-0	140-7	144-7	141-6	118-5	.....	.....
	Average.....	100-0	108-6	115-7	107-7	98-1	114-6	124-9	124-4	121-7	136-0	147-1	126-5	150-2	164-5
		100-0	114-5	119-1	108-1	84-4	100-1	123-0	132-0	130-2	149-5	165-4	121-7	144-9	151-7
Mutton— Canada..... United Kingdom..... United States..... Australia..... New Zealand..... Belgium.....	Pure contract.....	100-0	128-2	153-5	127-1	108-0	108-0	128-5	133-4	131-6	169-4	181-6	131-6	152-0	159-6
		100-0	154-8	212-9	167-0	109-6	122-5	141-4	148-3	209-6	167-7	158-0	145-1	183-8	.....
		100-0	121-0	145-0	120-0	100-0	104-0	124-0	129-0	127-0	163-0	174-0	130-0	149-0	158-0
	Average.....	100-0	129-6	157-6	130-6	100-5	108-7	129-2	135-7	149-6	162-4	169-8	132-1	157-4	165-7
Lamb— Canada..... Australia..... New Zealand.....	Dressed.....	*100-0	*95-5	*109-7	*95-5	102-1	115-5	130-3	131-9	128-5	119-9	110-6	103-1	113-0	126-6
		100-0	94-4	95-8	97-2	98-6	98-6	101-4	102-8	97-2	87-5	97-2	93-1	104-2	109-7
		100-0	92-9	101-5	103-6	107-1	118-2	125-2	120-4	118-8	123-6	138-3	103-4	115-5	141-0
	Average.....	100-0	102-1	111-1	117-7	128-1	136-4	110-4	126-0	129-2	113-5	112-5	77-2	118-1	.....
Pork— Canada..... United States..... Australia..... Belgium.....	Dressed.....	100-0	98-1	104-9	106-6	114-2	114-7	111-7	116-7	113-8	103-1	106-1	98-1	119-3	134-9
		100-0	89-5	92-8	86-1	102-9	124-1	125-9	131-3	122-7	134-9	150-2	128-3	152-5	177-3
		100-0	106-6	96-3	111-8	126-6	117-3	105-5	103-9	104-3	94-4	91-2	101-0	113-3	.....
	Average.....	100-0	101-4	99-8	100-7	119-8	127-2	118-0	120-8	119-6	118-0	122-0	119-7	138-4	161-0
Canada heavy short-cut mess..... United States..... Australia..... Belgium.....	Salt mess.....	100-0	107-8	127-6	122-8	99-7	110-6	120-3	129-8	121-6	142-0	162-7	129-7	142-3	164-8
		100-0	124-9	143-4	133-1	112-2	115-3	140-0	140-5	127-9	170-7	190-0	153-2	154-2	179-7
		100-0	118-7	146-8	159-3	134-4	131-3	106-2	125-0	140-6	150-0	131-2	109-4	115-6	.....
	Average.....	100-0	115-2	115-2	112-7	105-9	120-4	128-8	119-5	111-1	122-1	.....	.....	.....	.....
Average.....		100-0	115-4	133-3	132-0	113-1	119-4	123-8	128-7	125-3	146-2	152-3	123-7	130-4	151-5

\*Average of ewes and tailows.

## WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<b>II. Animals and Meats</b>															
—(continued).															
Sheep—															
Canada.....	Export ewes.....	100-0	91-6	98-5	91-5	94-7	107-0	127-1	129-3	115-9	110-3	130-3	114-2	134-4	151-7
United States.....	Wethers, good to fancy.....	100-0	81-3	91-7	90-0	100-5	122-6	120-1	118-9	102-4	112-3	114-7	88-5	101-9	110-6
France.....	.....	100-0	102-9	110-1	120-3	115-9	111-6	103-7	115-9	118-8	115-9	137-7	137-7	137-7	137-7
Germany.....	.....	100-0	101-0	108-0	119-0	114-0	124-0	135-0	133-0	126-0	127-0	132-0	135-0	148-0	163-0
Russia.....	(Live sheep).....	100-0	100-9	103-3	110-2	107-6	111-2	118-3	127-3	127-0	130-8	129-6	113-6	.....	.....
Average.....	.....	100-0	95-5	102-3	106-6	106-5	115-3	121-8	124-9	118-0	119-3	128-9	117-8	134-4	148-5
<b>Veal—</b>															
Canada.....	Dressed.....	100-0	89-7	95-6	96-7	92-6	102-1	106-7	113-1	102-3	112-6	125-2	121-9	126-2	143-0
Australia.....	.....	100-0	105-0	95-0	95-0	115-0	85-0	85-0	85-0	95-0	80-0	80-0	80-0	95-0	.....
Belgium.....	.....	100-0	103-8	108-4	114-6	111-5	110-8	120-4	119-2	120-4	117-1	.....	150-0	.....	.....
Holland.....	.....	100-0	107-1	114-3	128-6	113-6	117-9	127-1	117-1	117-1	118-6	130-0	100-0	.....	.....
Average.....	.....	100-0	101-4	103-3	108-7	108-2	104-0	109-8	108-6	108-7	107-1	111-7	117-3	116-5	132-0
<b>III. Dairy Produce—</b>															
<b>Butter—</b>															
Canada.....	Creamery, finest, Montreal.....	100-0	100-9	101-3	98-9	93-9	108-6	110-6	119-3	131-0	114-9	120-8	121-8	142-5	133-5
Canada.....	Dairy, Toronto.....	100-0	91-4	92-6	93-0	81-5	103-7	109-1	123-0	131-7	124-3	120-9	114-3	145-5	130-0
United Kingdom.....	.....	100-0	101-1	100-9	100-9	97-9	100-2	103-9	104-3	112-3	107-9	108-7	111-3	112-3	106-8
United States.....	Creamery, New York and Elgin markets.....	100-0	96-7	110-6	105-1	98-7	111-2	111-9	126-3	122-1	131-4	135-3	120-0	138-0	142-4
United States.....	Dairy, New York State.....	100-0	94-9	109-5	101-6	93-1	110-6	110-0	126-3	115-8	127-4	137-4	121-6	141-9	143-7
Australia.....	.....	100-0	129-3	153-3	122-6	102-6	124-0	122-6	124-2	148-0	136-0	121-3	122-6	144-0	.....
New Zealand.....	.....	100-0	116-8	123-1	114-7	107-4	122-1	127-4	116-8	145-3	167-3	165-3	.....	.....	.....
Belgium.....	.....	100-0	99-3	97-8	96-3	99-0	101-1	105-1	103-7	104-7	106-8	.....	.....	.....	.....
Holland.....	.....	100-0	102-0	98-1	101-5	100-5	106-1	109-4	106-1	111-1	111-1	115-2	123-6	.....	.....
France.....	.....	100-0	103-3	100-0	93-3	95-0	96-7	103-3	100-0	100-0	98-3	101-6	106-7	.....	.....
Germany.....	.....	100-0	105-0	101-0	112-0	107-0	112-0	115-0	114-0	119-0	120-0	123-0	129-0	134-0	127-0
Russia.....	.....	100-0	92-6	92-7	90-6	91-3	94-0	97-7	103-8	111-6	106-7	105-9	107-6	.....	.....
Average.....	.....	100-0	104-1	107-4	102-7	98-4	107-3	110-5	112-0	120-1	130-3	122-0	123-3	138-1	132-4

Cheese— Canada..... United Kingdom..... United States.....	100-0	86-0	95-4	103-2	82-9	99-9	112-0	112-6	111-9	107-7	113-5	112-2	124-2	114-1
	100-0	95-3	99-6	103-6	90-5	102-8	113-8	115-0	114-6	113-0	109-5	120-2	126-9	121-0
	100-0	89-6	99-8	107-9	90-3	107-4	116-4	125-4	120-9	131-7	139-4	124-1	145-9	136-6
	100-0	130-4	154-0	130-4	86-9	143-4	123-9	134-7	173-9	152-1	123-9	132-6	191-3	.....
	100-0	100-0	100-0	94-2	88-9	88-9	91-6	73-7	75-3	69-5	66-3	.....	.....	.....
Australia..... New Zealand..... Holland..... France..... Average.....	100-0	100-0	98-8	100-0	106-8	106-0	112-0	108-5	106-0	113-3	121-1	146-6	.....	.....
	100-0	105-6	109-2	100-0	102-1	105-6	84-5	116-2	116-2	123-2	133-8	139-4	.....	.....
	100-0	101-1	108-1	105-1	92-6	107-7	107-7	112-3	117-0	115-8	115-4	121-2	145-0	135-7
	100-0	105-3	109-5	105-7	125-6	122-1	127-7	133-4	133-4	151-0	152-8	155-3	184-7	200-1
	100-0	94-0	106-5	106-2	138-8	123-4	121-4	146-4	142-2	165-1	161-8	151-2	183-8	170-0
Eggs— Canada..... United Kingdom..... United States..... Australia..... Japan.....	100-0	100-0	103-8	104-0	105-3	113-0	117-4	119-9	123-2	127-4	124-2	130-4	137-3	138-8
	100-0	106-0	121-8	122-3	134-1	137-2	132-3	140-2	141-0	159-2	164-8	150-6	167-7	165-4
	100-0	112-6	121-5	134-1	106-3	100-0	98-7	107-5	124-0	125-3	116-4	121-5	136-7	.....
	100-0	94-0	94-0	96-0	99-0	115-0	113-0	114-0	115-0	117-0	119-0	120-0	127-0	.....
	100-0	102-1	109-5	111-4	118-2	118-5	118-4	126-0	129-8	140-8	139-8	138-2	156-2	150-3
Milk— Canada..... United Kingdom..... United States..... Japan.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	111-6	122-6	115-4	115-5	115-5	121-5	129-2
	100-0	106-4	109-1	104-9	101-3	92-4	96-3	103-1	102-9	104-6	104-6	112-6	113-5	112-6
	100-0	95-5	105-0	105-0	100-3	105-4	109-8	122-2	120-0	123-3	134-2	122-6	134-2	128-7
	100-0	98-0	98-0	98-0	98-0	98-0	95-0	95-0	98-0	98-0	95-0	93-0	90-0	.....
	100-0	100-0	103-0	102-0	99-9	99-0	100-3	108-0	110-9	110-3	112-3	110-9	114-8	115-4
IV. Fish. Fish— Canada..... United Kingdom..... Average.....	100-0	106-4	103-6	109-2	112-3	108-7	113-5	121-7	113-3	125-7	132-6	134-9	146-3	148-5
	100-0	83-4	86-0	79-6	68-3	78-1	91-6	83-2	78-0	87-9	88-1	98-5	95-3	110-5
	100-0	94-9	94-8	94-4	90-3	93-4	102-6	102-5	95-7	106-8	110-4	116-7	120-8	131-3
	100-0	100-0	87-5	100-0	100-0	100-0	100-0	100-0	75-0	112-5	126-1	140-7	143-8	119-8
	100-0	113-0	96-1	110-6	137-4	139-5	143-5	146-0	137-7	132-5	130-9	150-2	152-9	153-0
Cod— Canada..... United States..... Average.....	100-0	106-5	91-8	105-3	118-7	119-8	121-8	123-0	106-4	122-5	128-5	145-5	148-4	136-4
	100-0	100-0	87-5	100-0	100-0	100-0	100-0	100-0	75-0	112-5	126-1	140-7	143-8	119-8
	100-0	113-0	96-1	110-6	137-4	139-5	143-5	146-0	137-7	132-5	130-9	150-2	152-9	153-0
	100-0	100-0	87-5	100-0	100-0	100-0	100-0	100-0	75-0	112-5	126-1	140-7	143-8	119-8
	100-0	113-0	96-1	110-6	137-4	139-5	143-5	146-0	137-7	132-5	130-9	150-2	152-9	153-0
Herring— Canada..... United States..... Average.....	100-0	100-0	100-0	100-0	88-8	88-8	88-8	100-0	100-0	100-0	103-6	100-0	105-6	109-2
	100-0	98-0	96-5	112-7	107-3	118-0	124-8	121-0	119-0	118-7	122-8	115-2	126-0	126-3
	100-0	103-3	89-1	79-1	72-0	67-5	71-8	81-4	77-9	77-2	77-9	76-5	76-8	.....
	100-0	81-0	89-0	74-0	69-0	94-0	101-0	80-0	74-0	74-0	84-0	86-0	101-0	109-0
	100-0	89-0	94-8	85-6	78-4	85-7	99-8	91-6	78-5	89-5	90-9	88-5	.....	.....
Average.....	100-0	94-3	93-9	90-3	83-7	90-8	97-2	94-8	87-9	91-9	95-8	93-2	100-8	104-6
	100-0	94-3	93-9	90-3	83-7	90-8	97-2	94-8	87-9	91-9	95-8	93-2	100-8	104-6
	100-0	94-3	93-9	90-3	83-7	90-8	97-2	94-8	87-9	91-9	95-8	93-2	100-8	104-6
	100-0	94-3	93-9	90-3	83-7	90-8	97-2	94-8	87-9	91-9	95-8	93-2	100-8	104-6
	100-0	94-3	93-9	90-3	83-7	90-8	97-2	94-8	87-9	91-9	95-8	93-2	100-8	104-6



Australia.....	100-0	101-6	100-0	88-3	73-3	73-3	81-6	96-6	90-0	83-3	90-0	88-3	90-0
New Zealand.....	100-0	96-1	88-2	81-4	55-9	52-9	56-9	92-1	55-9	49-0	66-7	.....	.....
Average.....	100-0	95-3	96-4	87-1	72-9	67-7	76-3	101-3	88-2	69-7	72-6	91-7	88-0
Beans—													
Canada.....	100-0	103-5	97-4	115-9	94-5	103-7	105-9	100-3	118-8	131-2	126-4	125-4	170-4
United States.....	100-0	104-5	91-6	107-9	95-8	102-6	90-6	84-9	110-6	116-8	114-4	109-1	148-0
Belgium.....	100-0	102-6	112-1	111-8	107-8	112-6	119-0	117-3	114-5	119-8	.....	.....	104-5
Holland.....	100-0	108-1	93-3	90-8	89-3	105-6	107-1	105-1	107-4	115-0	102-3	116-0	.....
Average.....	100-0	104-7	98-6	106-6	96-9	106-1	105-7	101-9	112-8	120-7	113-9	117-0	83-2
Onions—													
Canada.....	100-0	153-1	156-8	115-7	210-8	362-2	140-0	94-7	*	*	139-6	217-4	279-7
United States.....	100-0	144-3	150-1	147-0	146-5	133-5	135-6	144-2	145-7	127-3	122-1	127-9	188-5
Average.....	100-0	148-7	153-5	131-4	178-7	247-9	137-8	119-5	145-7	127-3	130-7	172-7	92-4
Potatoes—													
Canada.....	100-0	119-9	192-7	252-8	148-5	187-7	194-0	228-5	224-5	202-0	193-1	294-4	202-3
United Kingdom.....	100-0	109-3	94-8	109-3	124-7	104-1	101-0	105-2	113-4	89-7	89-2	109-3	348-2
United States.....	100-0	150-9	159-4	140-4	195-3	107-7	146-4	131-4	190-4	183-4	114-4	206-1	117-5
Australia.....	100-0	181-2	198-6	106-8	81-1	259-4	240-2	99-5	172-8	148-8	193-3	183-3	157-7
Belgium.....	100-0	111-4	113-1	155-0	132-1	140-6	143-5	133-0	134-6	132-5	.....	.....	300-6
Holland.....	100-0	100-7	160-7	115-3	135-8	119-0	102-2	119-0	126-3	147-4	172-7	.....	.....
France.....	100-0	142-9	128-6	142-9	129-6	142-9	157-2	142-9	170-1	170-1	185-8	214-4	.....
Germany.....	100-0	84-0	79-0	99-0	129-0	122-0	81-0	118-0	117-0	112-0	95-0	142-0	108-0
Average.....	100-0	125-0	133-4	140-2	134-4	147-9	145-7	134-6	154-2	145-6	145-2	189-1	190-3
Flour—													
Canada.....	100-0	97-5	100-5	103-0	137-2	133-2	100-0	123-6	130-2	154-3	146-4	131-6	133-8
Manitoba, 1st pat.	100-0	100-8	98-2	103-4	123-2	124-8	107-5	124-2	145-9	139-0	139-0	127-7	136-6
Town-made, white	100-0	96-3	94-5	98-2	103-7	103-7	96-3	105-4	114-8	123-9	112-7	105-4	134-5
United Kingdom.....	100-0	99-2	99-1	112-7	140-0	141-2	111-3	127-0	141-1	149-9	143-1	132-2	111-1
United States.....	100-0	98-7	104-1	107-2	144-1	135-6	107-9	119-0	128-1	162-8	140-1	137-2	118-2
Australia.....	100-0	97-9	147-0	185-5	121-0	119-0	114-3	135-2	143-5	165-6	144-7	128-4	128-6
New Zealand.....	100-0	88-6	130-3	144-3	117-8	121-5	113-9	124-0	145-6	141-8	126-6	.....	.....
France.....	100-0	100-8	100-8	101-6	104-6	114-3	113-5	122-9	122-7	123-2	119-1	118-3	.....
Germany.....	100-0	107-0	107-0	103-0	109-0	109-0	113-0	130-0	134-0	134-0	131-0	129-0	139-0
Russia.....	100-0	101-4	91-3	88-7	90-5	95-3	109-1	124-4	131-4	147-6	112-1	124-7	.....
Average.....	100-0	98-8	106-6	116-8	115-0	116-3	109-2	123-6	133-1	141-4	128-8	123-4	123-3

\*No quotations.



Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<i>V. Other Foods—(con.)</i>															
Bread—	Toronto.....	100-0	100-1	100-0	100-0	103-1	101-0	91-6	108-3	119-9	125-0	119-9	101-9	100-0	117-1
	(Washington and New York).....	100-0	100-0	100-0	100-0	105-7	108-7	108-7	108-7	112-5	115-5	116-9	116-9	120-7	122-4
Average.		100-0	100-5	100-0	100-0	104-4	104-8	100-1	108-5	116-2	120-2	118-4	109-4	110-3	119-7
Biscuits (soda)—		100-0	106-7	115-7	117-3	117-3	117-3	117-3	117-3	117-3	129-2	137-3	133-4	128-1	128-1
	(Crackers, soda)....	100-0	103-7	103-7	95-7	97-4	101-2	96-3	96-3	96-3	96-9	103-7	96-3	96-3	96-3
Average.		100-0	105-2	109-7	105-5	107-4	109-3	106-8	106-8	106-8	113-1	120-5	114-9	112-2	112-2
Oatmeal—		100-0	111-1	143-6	119-0	138-9	144-1	136-2	163-2	178-2	161-3	139-3	146-3	152-7	139-5
	Canada.....	100-0	93-9	127-5	109-3	70-3	79-2	97-7	105-3	125-0	95-1	98-5	101-6	135-0	.....
Average.		100-0	102-9	136-6	111-9	90-1	104-9	124-7	151-5	136-6	104-9	113-9	.....	.....	.....
Rice—		100-0	102-6	135-9	113-4	99-8	109-4	119-5	140-0	146-6	120-4	117-2	122-1	144-9	132-4
	Patna.....	100-0	100-0	100-0	106-4	107-8	107-8	107-8	108-3	114-9	115-5	119-8	122-2	118-2	124-2
Average.		100-0	100-0	100-0	106-4	107-8	107-8	107-8	108-3	114-9	115-5	119-8	122-2	118-2	124-2
	(Patna).....	100-0	95-8	83-7	97-0	87-2	90-3	92-3	106-8	99-1	96-2	92-9	98-8	120-0	103-7
Domestic, choice.		100-0	100-0	101-9	103-3	80-4	70-1	86-5	97-5	113-8	112-9	99-8	91-4	99-8	101-1
	Australia.....	100-0	106-8	111-7	111-4	108-7	107-3	109-0	120-1	122-3	119-3	117-2	112-4	127-2	.....
Average.		100-0	74-7	73-7	81-1	76-8	73-7	78-8	77-8	77-8	73-7	71-1	.....	.....	.....
	Whole.....	100-0	100-0	100-0	91-3	97-4	102-2	104-3	108-7	126-1	122-6	113-0	119-6	137-0	117-0
Germany.		100-0	100-0	91-0	100-0	97-0	96-0	99-0	109-0	111-0	109-0	112-0	112-0	137-0	117-0
	Japan.....	100-0	101-0	107-0	114-0	112-0	114-0	128-0	142-0	135-0	111-0	114-0	149-0	180-0	.....
Average.		100-0	99-7	98-8	102-8	103-3	105-3	108-4	119-7	122-5	106-7	97-4	101-6	.....	.....
	Russia.....	100-0	97-8	96-8	102-1	98-0	97-9	102-2	110-0	113-5	107-6	104-6	110-4	123-1	119-0
<i>Cocoa—</i>															
Chocolate.		100-0	100-0	108-0	113-6	113-6	113-6	113-6	113-2	111-7	113-6	109-1	109-1	109-1	109-1
	Diamond.....	100-0	94-5	92-0	87-9	88-0	82-0	81-5	116-3	102-5	78-2	77-4	73-6	81-6	91-9
Average.		100-0	100-0	93-5	95-5	92-9	84-9	84-9	87-6	98-5	93-5	95-5	95-5	95-5	95-5
	Australia.....	100-0	100-0	93-5	95-5	92-9	84-9	84-9	87-6	98-5	93-5	95-5	95-5	95-5	95-5



Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913.
V. Other Foods—(con.) Sugar (granulated— Canada.....)	Granulated, Montreal.....	100-0	102-4	83-5	83-1	95-1	110-7	91-3	95-3	101-4	100-4	108-3	109-0	113-3	97-9
	United Kingdom.....	100-0	95-0	82-4	83-7	95-6	115-8	90-2	93-5	101-0	104-2	121-4	119-4	- 128-6	104-5
	United States.....	100-0	94-7	83-5	87-1	90-0	98-6	84-7	87-2	92-6	89-3	93-0	100-0	94-6	80-1
	Australia.....	100-0	101-3	91-0	90-2	89-0	96-1	88-7	87-3	91-4	94-2	99-0	96-7	104-7	
	New Zealand.....	100-0	101-1	91-4	93-5	92-5	103-2	95-7	92-5	72-0	74-2	80-6			
	India.....	100-0	102-7	79-1	75-5	87-3	101-8	97-3	109-1	106-4	110-9	114-5	102-7	104-5	
	France.....	100-0	83-9	71-0	83-9	104-5	122-6	103-2	103-2	116-1	119-4	151-6	158-1		
	Japan.....	100-0	98-	97-	100-	125-	141-	135-	128-	138-	135-	136-	137-	155-	
	(White, home).....	100-0	96-2	93-3	92-3	93-1	95-5	91-9	86-3	86-6	89-9	85-9	85-4		
	Russia.....	100-0													
Average.....		100-0	97-3	85-8	87-7	97-1	106-5	98-0	98-0	100-6	101-9	110-0	109-8	115-2	96-9
Pepper— Canada.....	Canada.....	100-0	103-4	103-4	103-4	103-4	103-4	104-1	100-6	100-6	81-4	92-6	95-3	115-9	114-1
	United States.....	100-0	100-1	97-2	99-8	95-2	94-3	88-1	77-0	55-4	55-1	61-9	74-9	89-0	84-0
	(Singapore).....	100-0	100-0	121-1	104-1	108-2	108-2	100-0	91-8	77-3	79-3	79-3			
	(White).....	100-0	98-	96-	99-	95-	92-	85-	73-	52-	54-	61-	73-	85-	80-
	New Zealand.....	100-0	107-8	106-9	107-3	107-8	107-3	105-8	101-0	86-5	84-5	71-3	96-9		
	Russia.....	100-0													
Average.....		100-0	101-9	104-9	102-7	101-9	101-0	96-6	88-7	74-4	70-9	73-2	87-8	104-5	100-1
Cream of Tartar— Canada.....	Canada.....	100-0	100-0	100-0	100-3	101-9	101-9	101-9	109-2	87-1	87-1	92-7	103-9	96-6	110-9
	Australia.....	100-0	101-2	96-1	102-5	97-4	91-0	89-7	101-2	92-3	82-0	94-8	103-9	100-0	
	Average.....	100-0	100-6	98-1	101-4	99-7	96-5	95-8	100-2	89-7	84-6	93-8	106-4	98-3	95-6
Salt— Canada.....	Canada.....	100-0	102-7	103-6	104-7	100-0	100-0	100-0	104-5	105-7	109-0	134-0	132-7	132-4	134-2
	United States.....	100-0	85-6	63-5	61-4	77-0	75-5	71-4	79-2	78-6	81-7	75-4	83-7	98-7	101-9
	(American).....	100-0	105-6	96-5	96-5	94-1	94-1	94-1	96-7	104-1	112-0	112-0	112-0	112-0	
	(Fine).....	100-0	87-9	89-1	85-5	89-1	100-0	93-9	109-6	112-0	125-3	115-7			
	New Zealand.....	100-0	109-1	87-0	77-9	74-0	71-4	75-3	79-2	75-3	58-5	63-7	92-2	92-2	
	India.....	100-0	83-	90-	96-	88-	184-	215-	217-	217-	216-	218-		207-	
	(Calcutta).....	100-0	103-8	121-0	117-0	119-6	149-9	143-4	126-2	122-2	172-2	143-4	126-2		
	Russia.....	100-0													
Average.....		100-0	96-8	93-0	91-3	91-7	110-7	113-3	116-1	116-4	125-0	123-2	131-6	137-9	141-1

Soda (bicarbonate)— Canada..... United States..... Australia..... New Zealand..... Average.....	100-0	90-0	86-9	86-9	86-9	86-9	86-9	86-6	81-6	85-9	86-0	85-9	62-0
	100-0	86-8	87-8	104-8	105-6	105-6	105-6	89-3	81-2	81-2	81-2	81-2	81-2
	100-0	97-2	92-8	97-2	109-4	120-7	125-3	122-1	109-8	110-5	112-3	110-9	81-2
	100-0	100-0	100-0	98-8	91-6	98-8	104-8	102-4	104-8	104-8	104-8	104-8	110-9
	100-0	93-5	91-9	95-2	94-2	98-4	103-0	105-7	94-2	95-6	96-2	95-8	82-5
Vinegar— Canada..... United States..... Average.....	100-0	93-7	93-7	93-7	87-5	87-5	81-3	75-0	71-9	75-5	69-4	75-0	75-0
	100-0	98-1	104-4	96-4	98-1	108-0	126-0	127-8	133-4	129-7	147-3	138-7	111-2
	100-0	95-9	99-1	95-1	92-8	97-8	103-7	101-4	102-7	102-6	108-4	106-9	93-1
VI. Textiles— Wool— Canada..... United Kingdom..... United States..... Average..... Australia..... New Zealand..... India..... France..... Germany..... Average.....	100-0	77-3	75-0	90-5	104-7	136-4	145-6	132-1	113-3	120-6	113-6	112-3	138-0
	100-0	81-2	79-9	97-2	136-2	158-2	166-8	184-8	141-2	166-7	169-4	160-1	201-6
	100-0	82-1	85-6	93-7	98-1	108-2	102-9	103-2	107-3	98-2	91-6	94-4	89-1
	100-0	77-8	76-5	87-7	93-8	98-8	111-1	110-1	100-0	107-4	104-9	93-8	
	100-0	75-7	81-5	99-1	108-7	127-1	145-6	140-8	136-9	146-7	112-9	117-7	
	100-0	108-1	106-5	95-2	95-2	133-9	121-0	111-3	90-3	106-5	103-6	103-6	
	100-0	64-9	64-4	72-0	82-2	93-3	99-6	105-3	102-7	108-9	103-6	103-6	
	100-0	80-0	89-0	100-0	101-0	105-0	115-0	118-0	113-0	115-0	110-0	112-0	123-0
	100-0	80-9	82-3	91-9	102-5	120-1	125-9	125-7	113-7	121-3	118-4	116-9	132-4
	100-0	91-7	84-6	84-6	94-1	111-7	123-5	129-5	111-7	126-9	127-1	127-8	135-3
Yarn— Canada..... United Kingdom..... United States..... Average.....	100-0	109-1	88-9	102-0	118-2	88-9	108-1	124-2	97-0	135-3	137-4	107-1	127-3
	100-0	86-4	93-2	97-7	98-5	104-0	107-4	107-6	108-5	104-0	100-2	101-3	97-5
	100-0	95-7	88-9	94-8	103-6	101-5	113-0	120-4	105-7	122-1	121-6	112-1	120-0
	100-0	89-7	92-9	116-9	125-9	99-4	114-7	123-6	126-0	157-3	135-7	119-7	133-1
	100-0	98-6	97-3	107-3	119-9	101-5	119-2	126-8	118-4	155-9	138-3	122-6	139-5
Cotton (raw)— Canada..... United Kingdom..... United States..... Australia..... India..... France..... Germany..... Japan..... Russia..... Average.....	100-0	89-7	92-9	116-9	125-9	99-4	114-7	123-6	126-0	157-3	135-7	119-7	133-1
	100-0	98-6	97-3	107-3	119-9	101-5	119-2	126-8	118-4	155-9	138-3	122-6	139-5
	100-0	89-7	92-9	116-9	125-9	99-4	114-7	123-6	126-0	157-3	135-7	119-7	133-1
	100-0	98-9	97-9	106-7	120-0	102-2	117-9	126-6	117-9	155-5	137-8	108-9	
	100-0	97-8	97-6	106-7	120-0	102-2	117-9	126-6	117-9	155-5	137-8	108-9	
	100-0	98-8	97-6	106-7	120-0	102-2	117-9	126-6	117-9	155-5	137-8	108-9	
	100-0	89-2	92-3	115-4	122-3	100-0	112-3	125-4	119-5	148-5	133-1	130-5	
	100-0	85-0	88-0	107-0	120-0	95-0	108-0	113-0	114-0	143-0	133-0	118-0	125-0
	100-0	107-0	104-0	101-0	116-0	117-0	120-0	124-0	126-0	140-0	147-0	136-0	
	100-0	96-3	96-6	112-6	108-2	99-4	109-3	119-7	116-0	136-8	124-3	124-3	
	100-0	94-7	95-5	109-9	119-1	101-5	114-7	122-0	119-5	148-2	138-1	119-6	132-3

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<i>VI. Textiles—(con.)</i>															
<i>Denims—</i>															
Canada.....	Blue.....	100-0	122-9	110-4	112-5	129-2	129-2	114-6	127-1	145-8	129-2	127-1	143-8	144-5	147-2
United States.....	Amoskaeg.....	100-0	97-4	97-9	105-1	113-4	100-9	114-9	128-7	108-1	116-6	135-1	128-3	126-4	132-0
Average.....		100-0	110-2	104-2	108-8	121-3	115-1	114-8	127-9	122-0	122-9	131-1	136-1	135-5	139-6
<i>Flannelette—</i>															
Canada.....	Cotton flannels, 2 <sup>1</sup> / <sub>2</sub> yards to the pound.....	100-0	98-9	98-9	103-0	105-9	102-9	102-9	105-9	117-2	100-3	103-2	114-6	105-4	104-9
United States.....		100-0	86-8	88-1	99-6	120-0	115-9	125-1	133-9	112-3	102-2	122-0	135-5	136-1	137-3
Average.....		100-0	92-9	93-5	101-3	113-0	109-4	114-0	119-9	114-8	101-3	112-6	125-1	120-8	121-1
<i>Ginghams—</i>															
Canada.....	Apron.....	100-0	112-0	108-0	106-0	115-1	124-3	129-0	124-3	130-6	121-6	139-3	159-4	151-2	152-5
Canada.....	Dress.....	100-0	117-7	100-0	100-0	108-9	117-2	120-4	107-5	135-9	114-0	118-3	137-4	118-0	134-8
United States.....	Amoskaeg.....	100-0	95-1	101-6	106-8	106-4	100-0	109-7	127-9	106-4	114-2	135-3	132-3	121-4	126-3
United States.....	Lancaster.....	100-0	96-6	104-5	104-5	101-0	94-0	107-6	125-5	104-2	108-3	120-0	117-6	109-1	112-4
Average.....		100-0	105-4	103-5	104-3	107-9	108-9	116-7	121-3	119-3	114-5	128-4	136-7	124-9	131-5
<i>Grey Cottons—</i>															
Canada.....	T. Cloth, Bombay	100-0	106-8	103-6	103-0	119-8	109-7	122-5	112-9	121-8	119-1	138-1	150-6	137-1	143-4
India.....		100-0	119-2	111-0	115-1	119-2	139-7	143-9	132-9	132-9	124-7	134-3	156-2	153-2	153-2
Germany.....	Cotton cloth.....	100-0	83-0	88-0	103-0	110-0	101-0	119-0	136-0	111-0	106-0	113-0	111-0	115-0	115-0
Average.....		100-0	77-3	75-7	107-0	116-3	116-8	128-5	127-3	121-9	116-6	128-5	139-3	136-1	142-3
<i>Prints—</i>															
Canada.....	Prints cloths.....	100-0	96-2	92-4	88-3	97-9	91-4	97-7	112-4	103-5	106-2	106-3	112-0	109-9	117-9
United States.....		100-0	91-4	100-3	104-3	108-0	101-3	117-6	154-1	108-9	116-5	124-1	113-1	123-7	122-4
Japan.....	(Calico)	100-0	98-0	100-0	101-0	124-0	136-0	128-0	133-0	138-0	133-0	140-0	154-0	154-0	154-0
Russia.....	(Calico)	100-0	100-0	100-0	106-6	113-2	102-6	121-6	137-1	127-2	115-8	132-6	130-0	130-0	130-0
Average.....		100-0	96-4	98-2	100-1	110-8	107-8	116-1	134-2	119-4	117-9	125-8	127-3	130-5	134-5
<i>Saxony—</i>															
Canada.....	(White flannels)	100-0	106-7	104-7	104-7	110-4	121-0	110-7	117-6	131-3	121-0	121-0	138-3	138-3	147-0
United States.....	4-4, Ballard vale No. 3.....	100-0	92-7	97-3	105-2	108-2	108-9	112-6	113-8	112-6	112-1	113-6	105-0	110-3	113-2
Average.....		100-0	99-7	101-0	105-0	109-3	115-0	111-7	116-0	122-0	116-6	117-3	121-7	124-3	130-1



Shirting—	100-0	110-2	100-0	107-4	114-8	107-4	103-7	122-3	111-1	114-8	125-9	115-6	115-7
Canada.....	100-0	118-3	112-2	128-0	123-2	140-2	128-0	139-0	126-8	153-6	173-2	150-0	157-0
United Kingdom.....	100-0	99-6	100-4	106-6	99-3	108-5	148-4	121-3	120-6	121-9	114-9	110-2	115-6
United States.....	100-0	102-3	95-2	92-8	89-3	107-1	113-1	109-5	101-2	114-2	125-0	127-3	.....
India.....	100-0	107-6	102-0	103-3	106-7	115-8	123-3	123-0	114-9	126-1	134-8	125-8	123-0
Average.....	100-0	107-6	102-0	103-3	106-7	115-8	123-3	123-0	114-9	126-1	134-8	125-8	123-0
Ticking—	100-0	118-3	110-2	110-2	118-3	114-3	126-5	151-0	122-4	128-6	146-7	141-3	143-7
Canada.....	100-0	93-4	96-9	101-9	99-9	116-4	126-6	103-7	108-9	118-5	122-9	118-8	124-2
United States.....	100-0	99-7	103-6	106-1	109-1	115-4	126-6	127-4	115-7	123-6	134-8	130-1	134-0
Average.....	100-0	99-7	103-6	106-1	109-1	115-4	126-6	127-4	115-7	123-6	134-8	130-1	134-0
Silk (raw)—	100-0	85-3	91-0	100-3	85-7	95-9	123-7	92-6	97-1	88-8	86-1	84-5	97-0
Canada.....	100-0	84-3	91-7	99-2	87-4	99-9	121-4	93-3	92-1	84-6	83-3	82-6	87-4
United Kingdom.....	100-0	88-9	89-6	102-6	102-0	109-0	118-3	92-7	88-7	91-3	91-3	88-6	98-5
United States.....	100-0	85-3	91-0	100-3	85-7	95-9	123-7	92-6	97-1	88-8	86-1	84-5	97-0
India.....	100-0	84-3	91-7	99-2	87-4	99-9	121-4	93-3	92-1	84-6	83-3	82-6	87-4
Australia.....	100-0	88-8	94-1	102-6	102-1	109-0	118-3	92-8	88-6	91-5	91-2	86-5	.....
Cossin-bazaar.....	100-0	84-0	82-7	81-5	87-7	95-1	107-4	76-6	77-8	75-3	81-5	86-5	.....
France.....	100-0	90-5	75-3	106-8	95-3	100-7	131-1	89-2	93-9	94-5	93-9	91-0	96-0
Germany.....	100-0	89-0	97-0	105-0	97-6	105-0	130-0	94-0	97-0	94-0	93-0	91-0	96-0
Japan.....	100-0	84-0	84-0	103-0	92-0	115-0	129-0	97-0	92-0	95-0	97-0	93-0	.....
Average.....	100-0	86-9	90-0	100-3	92-1	105-1	122-4	91-0	90-9	89-4	89-7	88-8	96-8
Flax (raw)—	100-0	92-0	80-9	93-2	95-2	93-2	93-2	90-8	88-3	92-2	100-7	106-8	98-5
Canada.....	100-0	117-2	115-5	108-0	118-1	117-6	107-2	99-6	111-1	118-4	136-0	128-9	128-0
United Kingdom.....	100-0	100-0	87-1	100-9	87-9	89-7	103-9	72-0	86-0	99-1	110-3	.....	.....
France.....	100-0	115-9	99-5	107-3	109-6	104-1	103-9	98-5	101-5	111-7	86-7	.....	.....
Russia.....	100-0	106-3	95-8	102-4	106-7	101-2	98-1	90-2	96-7	105-4	108-4	108-9	104-3
Average.....	100-0	106-3	95-8	102-4	106-7	101-2	98-1	90-2	96-7	105-4	108-4	108-9	104-3
Jute (raw)—	100-0	91-1	87-2	95-3	96-8	165-8	147-0	107-9	94-6	96-2	139-3	146-1	204-8
Canada.....	100-0	91-4	86-9	91-6	93-1	153-3	152-5	112-9	102-8	106-9	135-3	147-2	179-1
United Kingdom.....	100-0	92-0	100-7	106-6	102-1	168-7	152-1	115-9	99-6	107-8	146-3	160-7	209-6
India.....	100-0	96-4	82-3	100-0	96-9	171-7	175-8	126-8	95-4	97-9	155-2	151-6	.....
On average prices	100-0	87-5	82-0	100-0	125-0	175-0	150-0	125-0	112-5	125-0	137-5	137-5	.....
(Fibre).....	100-0	94-0	90-0	97-0	99-0	170-0	162-0	133-0	412-0	115-0	158-0	168-0	204-0
Germany.....	100-0	92-1	92-8	98-4	102-2	167-7	156-6	120-3	102-8	108-1	145-3	153-3	196-8
Average.....	100-0	92-1	92-8	98-4	102-2	167-7	156-6	120-3	102-8	108-1	145-3	153-3	196-8

WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
VII. Hides, Leather, Boots and Shoes. Hides—	(Canada).....														
	No. 1 inspected steers and cows	100-0	100-1	102-3	104-6	93-2	114-6	131-2	102-8	81-1	137-4	122-5	132-7	142-8	147-4
	(Green salted pack- ers, heavy native steers).....	100-0	100-8	104-5	108-5	106-9	113-0	123-1	132-0	119-0	127-1	135-2	132-5	141-7	162-8
	(Raw), declared	100-0	103-6	112-1	98-0	97-6	119-8	129-3	121-9	111-9	138-0	129-5	123-7	147-4	154-1
	(Raw), value	100-0	98-5	105-2	109-6	113-3	127-1	132-2	149-6	149-6	142-7	148-9	148-9	157-0	.....
Tallow—	(Raw).....	100-0	100-0	105-3	109-2	109-2	120-4	127-0	113-8	113-8	125-0	130-3	131-6	.....	.....
	(Germany).....	100-0	97-	111-	106-	110-	120-	133-	125-	114-	130-	142-	131-	164-	179-
	(Russia).....	100-0	100-7	98-6	109-2	135-4	142-4	151-1	151-5	143-8	160-1	174-9	167-4	.....	.....
	Average.....	100-0	100-1	105-6	106-4	109-4	122-5	132-4	128-1	119-0	137-2	140-5	138-3	156-1	168-4
Canada	Rendered No. 1 stock in brl.	100-0	98-5	118-8	98-7	80-8	76-4	86-2	100-4	96-8	100-5	101-3	102-1	105-0	108-0
	Town.....	100-0	101-8	118-5	107-3	96-3	96-3	110-9	125-9	110-9	110-9	129-1	121-8	120-0	125-0
	United Kingdom	100-0	106-8	129-7	105-1	94-6	92-6	107-0	128-1	113-6	122-5	150-3	133-8	128-1	129-5
	United States.....	100-0	98-4	112-3	104-6	90-7	95-4	107-7	110-7	107-7	115-4	123-0	131-	.....	.....
	France.....	100-0	107-0	116-8	112-6	102-4	103-7	110-6	125-5	122-1	120-2	130-5	124-3	.....	.....
Leather—	Average.....	100-0	102-5	119-2	105-7	93-0	92-9	104-5	118-1	110-2	113-9	126-8	121-0	119-8	123-0
	(Canada).....														
	No. 1 Spanish sole for jobbing.....	100-0	100-3	103-0	104-5	104-5	103-1	102-7	102-5	99-2	99-2	97-8	98-1	109-9	127-6
	(Canada).....	100-0	98-4	105-8	105-4	100-7	103-8	105-8	113-2	101-8	102-4	104-1	105-6	121-8	141-7
	(Canada).....	100-0	96-0	100-5	100-3	98-8	105-0	112-6	113-5	106-9	112-9	118-8	118-3	120-3	121-9
Canada	Heavy Upper	100-0	100-0	100-0	100-0	100-0	90-9	109-7	109-0	105-2	112-7	118-2	118-2	135-2	150-9
	Average import.....	100-0	100-9	108-4	115-9	112-1	114-0	119-6	133-6	129-0	129-0	130-8	129-0	130-8	143-9
	Chrome calf.....	100-0	95-7	100-6	105-1	104-7	106-2	109-2	116-7	113-3	120-0	118-0	117-4	128-0	139-9
	(Harness).....	100-0	98-2	98-2	97-9	94-2	98-5	109-7	110-4	103-7	112-6	112-1	109-0	112-9	116-4
	(Sole Hemlock).....	100-0	99-4	95-1	91-0	90-7	92-0	101-9	106-2	100-7	102-4	99-1	95-4	103-6	113-3
United States	(Sole, oak).....	100-0	97-7	105-3	103-7	95-6	101-5	105-2	105-9	105-3	114-4	114-9	107-7	115-1	124-4
	Average.....	100-0	98-9	103-5	105-8	103-1	104-8	111-3	117-7	112-7	116-1	117-2	115-5	122-5	134-3



WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
VIII. Metals and Im- plements—(con.)															
Iron (bar)—(con.)	Australia.....	100-0	88-6	73-5	69-6	68-9	68-1	74-1	77-5	78-6	75-3	75-1	73-4	82-9	
	New Zealand.....	100-0	94-1	84-6	77-9	74-1	72-8	76-5	79-4	80-8	76-5	77-1			
	India.....	100-0													
	Flat bolt, bar and square, Calcutta	100-0	84-3	85-6	84-3	78-3	73-5	78-3	141-0	137-9	153-0	155-4	156-7	159-1	
	France.....	100-0	87-6	64-7	61-8	61-8	70-6	88-2	88-2	82-3	82-3	82-3	83-3	85-3	
	Germany.....	100-0	80-0	78-0	76-0	76-0	77-0	80-0	80-0	80-0	78-0	78-0	84-0	83-0	83-0
Average..		100-0	83-3	79-6	76-7	72-3	75-8	82-7	93-0	90-1	87-6	89-6	87-7	93-0	99-6
Iron (galvanized)— Canada.....	Sheets.....	100-0	91-7	90-9	90-7	83-8	80-6	86-3	91-3	89-1	85-0	81-6	81-6	82-0	85-8
	Galvanized cor- rugated.....	100-0	94-1	89-5	89-4	86-7	84-7	87-4	100-1	94-2	93-3	90-3	88-4	91-5	
	New Zealand.....	100-0	90-7	87-4	87-4	82-3	80-7	87-4	96-6	97-5	92-4	84-9			
	Average..	100-0	92-2	89-3	89-2	84-3	82-0	87-0	96-0	93-6	90-2	85-6	84-7	86-4	90-4
Iron (tinplates)— Canada.....	Charcoal.....	100-0	100-0	100-0	100-0	96-3	96-3	96-3	96-3	89-5	88-9	85-3	98-8	103-8	103-8
	Domestic. Bes- semer coke.....	100-0	89-6	88-1	84-2	77-0	79-2	82-6	87-5	83-1	79-9	82-1	82-6	78-2	76-1
	Average..	100-0	94-8	94-1	92-1	86-7	87-8	89-5	91-9	86-3	84-4	83-7	90-7	91-0	90-9
	Lead— Canada.....	100-0	88-2	70-0	68-3	65-7	75-6	92-9	106-7	76-6	72-6	141-7	78-9	102-4	103-7
United Kingdom.....	Imported.....	100-0	76-7	65-6	67-4	68-7	77-9	99-4	113-1	79-9	76-7	76-1	79-9	102-4	107-1
	United States.....	100-0	98-5	92-4	96-2	99-6	107-6	132-1	124-1	94-9	96-4	100-7	100-0	99-6	98-9
	(Pig).....	100-0	94-3	78-9	79-7	77-2	84-5	105-7	118-7	91-9	84-5	75-6			
	New Zealand.....	100-0	69-8	61-9	60-4	64-0	75-0	91-7	104-2	70-8	68-7	67-7	72-9		
	France.....	100-0	75-0	65-0	67-0	68-0	79-0	100-0	111-0	78-0	75-0	74-0	81-0	103-0	108-0
	Germany.....	100-0	78-2	70-0	71-0	73-7	83-0	119-8	134-9	104-5	99-4	97-6	103-8		
Average..	100-0	83-0	72-0	72-9	73-8	83-2	105-9	116-1	85-2	81-9	90-5	88-1	106-8	109-5	
Silver— Canada.....	Bar, fine.....	100-0	96-1	85-0	87-3	93-1	98-3	108-6	106-3	86-1	84-0	85-6	85-7	98-0	96-3
	United States.....	100-0	96-1	85-0	87-3	93-1	98-3	108-6	106-3	86-1	84-0	87-3	87-0	99-0	97-3
	Average..	100-0	96-1	85-0	87-3	93-1	98-3	108-6	106-3	86-1	84-0	87-3	87-0	99-0	97-3





WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<b>IX. Fuel and Lighting—</b>															
Coal—															
Canada.....	Bituminous, N.S. run of mines.....	100.0	113.8	114.4	116.7	114.4	107.0	104.6	111.5	120.1	117.2	115.1	114.9	114.9	114.9
Canada.....	Bituminous, Crow's Nest Pass.....	100.0	98.7	101.3	106.7	107.8	109.5	111.5	116.9	117.0	117.3	126.8	136.5	152.2	152.2
Canada.....	Penn. Anthracite.....	100.0	105.0	114.7	119.0	116.4	115.7	114.9	115.5	115.5	113.9	115.9	119.3	129.3	137.0
United Kingdom.....	United States.....	100.0	83.1	73.8	70.1	66.7	63.4	65.5	76.5	76.5	67.8	70.4	68.5	76.1	83.7
United States.....	Egg anthracite.....	100.0	113.2	121.9	134.7	134.6	134.7	135.7	134.6	134.5	133.6	134.3	134.2	140.4	141.3
United States.....	George's Creek (bituminous).....	100.0	100.6	139.6	152.6	109.9	108.3	107.5	111.3	106.0	105.0	104.8	103.9	107.5	105.0
United States.....	Pittsburg, (bitu- minous).....	100.0	100.0	104.6	123.0	113.2	106.3	104.9	109.5	113.1	107.5	107.0	109.8	106.8	111.1
Australia.....	On wharf.....	100.0	111.1	107.6	93.2	73.6	67.9	80.7	100.6	105.3	105.3	105.3	105.3	105.3	105.3
New Zealand.....	India.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	101.3	101.3	101.3	101.3	101.3
India.....	(Calcutta.....	100.0	108.1	105.4	87.4	90.1	83.8	83.8	102.6	154.0	116.2	100.0	100.0	102.7	102.7
France.....	Germany.....	100.0	88.9	75.2	68.5	62.8	62.8	75.9	37.0	79.6	87.0	79.6	83.3	102.7	102.7
Germany.....	Japan.....	100.0	103.0	97.0	93.0	93.0	94.0	98.0	106.0	111.0	108.0	106.0	104.0	108.0	116.0
Japan.....	Russia.....	100.0	107.0	100.0	91.0	95.0	126.0	133.0	131.0	125.0	124.0	112.0	119.0	120.0	120.0
Russia.....	St. Petersburg.....	100.0	76.1	67.3	66.2	63.9	65.4	72.8	77.4	73.5	74.7	76.6	76.6	102.0	102.0
Average.....		100.0	98.8	95.8	92.0	87.7	89.0	93.6	100.4	106.0	101.6	93.6	99.8	103.7	109.0
<b>Coke (Connellsville, furnace)—</b>															
Canada.....		100.0	74.2	101.5	110.1	61.9	86.4	101.1	106.7	64.6	75.6	73.2	57.2	95.2	96.4
United States.....		100.0	74.2	101.5	110.1	61.9	86.5	101.1	106.8	64.6	75.7	74.4	62.1	90.7	92.2
Average.....		100.0	74.2	101.5	110.1	61.9	86.5	101.1	106.8	64.6	75.7	73.3	59.7	93.0	94.3
<b>(Gasoline—</b>															
Russia.....	Naphtha (Baker).....	100.0	108.8	123.5	135.2	102.9	111.7	126.4	111.7	100.0	100.0	102.9	97.0	118.1	147.0
Average.....		100.0	76.2	61.1	61.3	84.2	103.2	125.6	124.4	108.7	102.2	86.0	105.3	105.3	105.3
Average.....		100.0	92.5	92.3	98.3	93.6	107.5	126.0	118.1	104.4	101.1	94.5	101.2	123.3	153.5
<b>Coal Oil—</b>															
Canada.....	Canadian Stan- dard.....	100.0	100.0	107.3	123.4	127.2	108.4	106.4	100.0	109.1	103.3	87.8	81.4	90.7	102.3
Canada.....	United States Standard.....	100.0	100.0	104.7	117.2	120.5	105.9	103.1	102.0	93.5	94.0	91.2	83.2	93.8	96.1
United Kingdom.....		100.0	91.8	83.7	85.1	88.7	83.0	89.7	91.6	88.9	78.4	75.3	71.5	81.5	102.1

United States.....	Refined for Ex- port.	100-0	87-7	85-9	100-7	96-7	84-5	89-2	96-5	101-8	97-8	90-1	85-8	89-6	101-1
United States.....	Refined, water white.	100-0	92-2	93-3	114-7	115-1	106-3	109-4	113-3	113-6	103-1	90-8	77-8	94-0	103-8
New Zealand.....	(Calcutta).....	100-0	71-1	67-5	72-0	71-1	68-6	73-5	74-7	78-3	79-5	79-5	106-9	106-1	.....
India.....	(Calcutta).....	100-0	96-2	79-4	88-5	96-2	89-3	97-7	99-2	102-3	103-8	108-4	106-9	106-1	.....
France.....	.....	100-0	87-6	86-8	99-2	95-0	81-8	88-4	91-7	92-6	86-8	78-5	90-9	114-0	.....
Germany.....	(American).....	100-0	96-0	94-0	100-0	95-0	90-0	96-0	98-0	103-0	103-0	95-0	95-0	114-0	118-0
Germany.....	(Russian).....	100-0	92-0	86-0	93-0	92-0	91-0	96-0	100-0	106-0	100-0	97-0	98-0	113-0	.....
Russia.....	(Baker).....	100-0	77-4	69-6	78-2	89-9	90-5	92-5	103-7	97-0	96-0	83-0	92-3	.....	.....
Average.....	.....	100-0	89-1	84-6	93-8	95-3	88-5	93-1	96-1	97-0	93-8	88-5	88-9	99-7	109-4
<i>Matches—</i>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	.....	100-0	96-2	104-7	104-7	110-3	112-2	115-1	119-1	122-2	118-5	119-4	119-7	119-7	119-7
United States.....	.....	100-0	100-0	90-5	85-8	85-8	85-8	85-8	85-8	85-8	85-8	85-8	85-8	85-8	85-7
Australia.....	.....	100-0	110-3	143-9	138-7	150-0	155-1	152-5	196-5	225-8	106-0	155-3	172-4	172-4	.....
New Zealand.....	.....	100-0	100-0	100-0	100-0	90-0	90-0	90-0	100-0	105-0	106-2	116-2	.....	.....	.....
Average.....	.....	100-0	101-6	109-8	107-3	109-0	110-8	110-9	125-4	134-7	129-1	119-2	123-7	123-7	123-7
<i>X. Building Materials.</i>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
(a) <i>Lumber.</i>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	Total average Canadian lum- ber.	100-0	100-5	107-0	112-9	115-2	117-6	133-9	144-9	142-6	135-6	139-0	145-1	146-0	159-0
United Kingdom.....	.....	100-0	94-8	89-0	90-0	85-7	87-7	89-6	92-2	87-7	83-3	84-4	88-8	98-7	95-5
<i>Pine—</i>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	All grades, Ottawa	100-0	97-7	98-0	101-9	100-5	102-5	111-8	118-6	115-2	109-5	111-7	117-0	122-4	125-9
Canada.....	Good sidings.	100-0	100-0	100-0	103-0	106-1	112-1	130-3	124-2	124-2	124-2	124-2	121-2	124-2	130-0
Canada.....	No. 1 cuts, To- ronto.	100-0	99-1	95-7	110-4	114-5	110-4	113-3	114-0	113-8	117-2	135-9	132-0	148-0	146-6
United States.....	White boards, up- pers, New York markets.	100-0	100-0	105-6	136-4	140-6	147-4	151-8	151-6	139-6	131-6	148-7	184-4	189-4	173-1
United States.....	White boards, No. 2 barn, New York markets.	100-0	105-1	130-1	139-1	140-9	142-6	147-4	162-1	160-4	155-3	164-9	167-8	168-7	172-9
United States.....	(Yellow) sidings.	100-0	97-1	109-2	111-6	106-9	112-3	138-3	155-7	151-4	154-4	159-2	159-6	154-9	153-4
Japan.....	Balk.	100-0	94-9	101-3	101-3	103-4	120-2	141-6	147-2	147-2	159-5	148-7	147-7	160-0	155-1
Japan.....	(Plank 6 b u. in thick).	100-0	90-0	93-0	87-0	86-0	91-0	93-0	102-6	117-0	107-0	112-0	118-0	127-0	.....
Average.....	.....	100-0	91-0	83-0	79-0	76-0	84-0	83-0	96-0	104-0	96-0	96-0	103-0	107-0	.....
<i>Spruce—</i>	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Canada.....	.....	100-0	94-9	97-5	100-0	99-9	105-8	112-6	120-7	125-0	130-9	125-5	133-0	137-3	135-2
United States.....	N. B. spruce.	100-0	98-6	109-4	116-9	104-5	116-8	127-5	134-6	126-8	130-1	130-9	123-9	123-7	138-2
United States.....	.....	100-0	103-5	110-8	110-4	118-0	123-3	147-0	138-2	119-7	145-0	141-5	139-7	155-2	160-4
Average.....	.....	100-0	101-1	110-1	113-7	111-3	120-1	137-3	131-4	123-3	137-7	136-2	131-8	139-5	149-3

## WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
X. <i>Building Materials</i> —(continued). (a) <i>Lumber</i> —(con.) <i>Shingles</i> —	Canada.....	100-0	94-2	123-5	128-8	118-2	115-8	120-5	148-8	160-0	141-1	142-6	135-0	153-4	176-5
	United States.....	100-0	104-7	115-1	117-0	114-6	112-2	147-1	179-1	133-8	133-2	133-5	120-5	128-8	130-7
	Japan.....	100-0	120-0	102-0	97-0	97-0	100-0	88-0	108-0	108-0	101-0	114-0	120-0	119-0	.....
	Average.....	100-0	106-3	113-5	114-3	109-9	109-3	118-5	145-3	133-9	125-1	130-0	125-2	133-7	144-7
	<i>Maple</i> —														
Canada.....	Toronto.....	100-0	100-0	108-6	114-3	128-7	121-5	126-2	126-7	122-9	120-7	114-3	143-6	142-9	157-5
	(Hard).....	100-0	97-2	103-8	115-1	112-7	110-9	112-7	117-2	114-9	112-7	115-6	124-8	132-5	139-4
	Average.....	100-0	98-6	106-2	114-7	120-7	116-2	119-5	122-0	118-9	116-7	115-0	134-2	137-7	148-5
	<i>Oak</i> —														
	Canada.....	100-0	106-0	111-3	112-1	134-0	156-9	163-9	168-1	174-7	173-9	188-0	188-0	186-6	200-6
United States.....	White, plain.....	100-0	90-0	100-1	109-7	113-8	116-0	123-5	135-2	130-7	118-6	132-8	133-9	137-7	148-4
	(Building).....	100-0	105-3	105-3	105-3	105-3	105-3	115-8	115-8	115-8	115-8	115-8	115-8	.....	.....
	Average.....	100-0	100-4	105-6	109-0	117-7	126-1	135-4	139-7	137-1	136-1	145-5	145-9	147-5	158-9
	<i>Miscellaneous Building Materials.</i>														
	Bricks—														
Canada.....	Common building.....	100-0	100-7	100-7	100-7	136-5	165-3	145-0	157-0	163-2	163-8	171-6	171-6	175-6	187-6
	United Kingdom.....	100-0	91-7	83-3	83-3	83-3	81-1	77-8	79-4	81-1	75-0	75-0	75-0	79-2	88-1
	United States.....	100-0	109-8	102-5	112-5	142-7	154-3	162-8	117-2	97-2	121-6	102-9	112-2	128-7	125-0
	Average.....	100-0	100-7	95-5	98-8	120-8	133-6	128-5	117-9	113-8	120-1	116-5	119-6	127-8	134-2
	<i>Cement</i> —														
Canada.....	Canadian Portland.....	100-0	91-1	89-8	86-4	70-9	65-1	69-1	71-7	72-8	59-2	56-5	56-8	54-8	52-6
	United States.....	100-0	100-2	85-1	87-5	78-9	81-9	93-5	93-5	93-5	93-5	93-0	89-2	84-5	73-2
	Australia.....	100-0	99-1	87-6	80-2	74-0	81-3	76-4	80-5	86-3	79-9	84-6	89-6	97-2	.....
	New Zealand.....	100-0	101-1	97-9	96-9	93-8	92-8	90-7	96-9	93-8	90-7	90-7	.....	.....	.....
	Average.....	100-0	130-5	120-1	117-0	105-9	107-0	82-4	85-7	86-6	80-8	81-2	81-8	81-7	74-6

Lead pipe— Canada..... United States..... Australia.....	100-0 100-0 100-0	88-5 98-6 82-5	76-9 101-9 68-7	78-5 101-4 78-6	73-9 93-6 83-7	83-7 101-9 86-7	91-9 125-4 101-6	112-0 131-0 110-9	97-3 92-6 97-3	84-8 94-2 95-3	87-7 98-8 91-6	83-5 98-2 83-1	92-8 101-3 101-4	112-7 99-2 .....
Average.....	100-0	89-9	82-5	86-2	84-7	90-8	106-3	118-0	95-7	91-4	92-7	88-3	98-5	108-1
Lime— Canada..... United States..... (Common).....	100-0 100-0 100-0	110-0 113-3	110-0 118-0	110-0 115-2	110-0 120-7	110-0 130-4	110-0 138-7	115-0 138-9	115-0 152-9	119-9 152-9	119-9 152-9	120-0 162-2	125-0 158-8	140-0 157-9
Average.....	100-0	111-8	114-0	112-6	115-4	120-2	124-4	127-0	134-0	136-4	136-4	141-1	141-9	148-9
Nails— Canada..... United States..... Cut..... Wire..... Cut, 8-penny, fence and com- mon..... Wire, 8-penny fence and com- mon.....	100-0 100-0 100-0 100-0 100-0 100-0	91-8 88-7	91-8 79-9	93-6 76-2	90-0 74-6	91-4 71-1	94-7 66-9	91-8 77-1	88-3 72-3	86-1 72-0	83-5 74-8	83-5 74-3	92-5 74-4	89-8 71-2
United States.....	100-0	93-9	94-9	97-6	80-8	81-2	85-9	96-1	86-7	83-1	82-0	76-0	75-9	78-7
Japan.....	100-0	89-8 98-0	79-9 90-0	78-8 86-0	72-4 90-0	72-0 96-0	74-4 98-0	80-4 110-0	79-7 102-0	72-8 90-0	71-7 86-0	68-6 90-0	66-1 96-0	69-0 .....
Average.....	100-0	93-4	87-8	86-4	83-0	84-6	86-3	94-3	88-5	82-4	80-7	80-4	83-5	83-8
Tar— Canada..... United States.....	100-0 100-0	98-9 94-1	113-0 97-3	113-0 123-3	113-0 123-3	113-0 129-0	113-0 143-7	113-0 170-9	100-0 117-4	98-9 120-2	98-9 165-4	98-9 155-9	101-2 146-8	127-1 163-3
Average.....	100-0	96-5	105-2	118-2	118-2	121-0	128-4	142-0	108-7	109-6	132-2	127-4	124-0	145-2
Wire, copper— Canada..... United States..... (barb).....	100-0 100-0 100-0	100-8 100-8	73-7 73-7	83-2 83-2	79-9 79-9	94-6 94-6	117-1 117-1	133-4 133-4	84-4 84-4	82-4 82-4	79-7 79-7	77-1 77-1	97-0 97-0	92-9 92-9
Average.....	100-0	100-8	73-7	83-2	79-9	94-6	117-1	133-4	84-4	82-4	79-7	77-1	97-0	92-9
Wire— Canada..... United States..... Fencing..... Barb, galvan'd..... Australia..... New Zealand..... No. 8.....	100-0 100-0 100-0 100-0 100-0	88-4 90-8 89-4 79-4 93-6	87-4 88-6 87-0 71-1 88-9	79-0 83-3 80-7 71-5 83-5	78-0 80-1 73-9 66-2 80-7	67-9 78-2 70-2 69-4 79-8	67-9 78-3 71-5 73-5 82-6	71-8 87-8 77-6 73-5 87-1	72-6 89-1 77-2 77-8 86-2	73-8 73-6 62-8 74-0 83-5	74-2 72-8 64-2 73-1 .....	71-8 72-6 62-8 67-7 .....	71-8 72-6 64-2 67-7 .....	72-6 72-1 68-0 .....
Average.....	100-0	88-3	84-6	79-6	75-8	73-1	74-8	80-0	78-4	74-6	73-5	73-7	71-3	73-3
(c) Paints, Oils and Glass— Linseed Oil— Canada..... United Kingdom.....	100-0 100-0	102-3 98-4	100-8 91-8	73-9 68-8	60-5 52-4	69-0 59-0	69-8 68-0	76-6 76-7	76-2 72-9	83-0 81-1	111-1 120-7	138-2 138-5	114-9 115-6	77-5 81-1

WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity	Description	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
X. <i>Building Materials</i> (continued) (c) Paints, Oils and Glass—(con.) Linsced Oil—(con.)	Raw	100.0	100.9	94.3	66.3	66.1	74.3	64.3	69.0	69.6	92.2	134.6	139.8	106.9	73.5
	United States	100.0	118.5	118.5	107.6	85.7	84.0	86.5	94.1	84.9	88.2	115.1	115.1	106.9	73.5
	New Zealand	100.0	113.2	113.2	113.2	113.2	120.8	145.3	141.5	133.6	140.7	201.2	205.6	106.9	73.5
	France	100.0	130.0	111.5	85.5	81.9	76.9	93.5	91.4	81.3	102.1	125.4	128.8	106.9	73.5
	Russia	100.0	110.6	108.2	85.9	76.6	80.7	87.9	91.6	86.4	94.6	134.7	147.6	119.6	82.3
	Average	100.0	101.2	106.0	110.0	89.6	80.2	83.9	88.7	88.9	91.4	115.9	120.0	120.7	126.3
	Putty—	100.0	78.9	101.0	74.2	57.9	57.4	62.6	63.1	63.1	63.1	60.5	60.5	60.5	60.5
	Canada	100.0	90.1	103.5	92.1	73.8	68.6	73.3	75.9	76.0	77.3	88.2	90.3	90.6	93.4
	United States	100.0	100.0	100.0	137.5	154.2	166.7	239.0	271.8	300.1	300.1	*302.7	*311.3	*294.1	277.9
	Average	100.0	95.5	100.6	138.3	176.8	213.6	250.5	273.1	204.8	218.4	326.5	419.1	414.5	300.5
Rosin— Canada United States Russia	White	100.0	100.0	100.0	137.5	154.2	166.7	239.0	271.8	300.1	300.1	*302.7	*311.3	*294.1	277.9
	Good, strained	100.0	101.4	103.3	117.8	132.9	151.3	159.8	165.2	154.6	152.0	180.9	215.8	215.8	300.5
	Average	100.0	99.0	107.3	131.2	154.6	177.2	216.4	236.7	219.8	223.5	270.0	315.4	305.0	254.7
	Canada	100.0	78.7	97.8	114.9	117.1	127.5	132.4	122.1	84.5	88.5	103.2	103.2	103.2	85.7
	United States	100.0	78.1	99.4	119.9	120.7	131.5	139.4	133.0	95.0	102.9	143.2	142.3	98.6	89.7
	Spirits of	100.0	78.4	98.6	117.4	118.9	129.0	135.9	127.6	89.8	95.7	123.2	122.8	100.9	87.7
	Average	100.0	93.9	83.2	75.1	69.9	75.1	93.4	109.7	91.2	90.9	87.0	90.8	110.7	122.0
	White lead—	100.0	92.2	86.2	98.4	95.7	101.3	110.4	111.5	104.1	101.9	110.7	113.1	109.1	108.2
	Canada	100.0	87.9	73.9	67.4	67.6	64.6	70.4	80.0	74.4	71.2	72.2	76.6	92.0	108.2
	Australia	100.0	95.7	92.9	102.2	101.2	93.9	108.1	117.8	111.8	105.7	104.6	104.6	104.6	108.2
Turpentine— Canada United States Russia	Average	100.0	92.4	84.1	85.8	83.6	83.7	95.6	104.8	95.4	92.4	93.6	96.3	108.6	113.7
	White glass—	100.0	100.8	104.0	93.4	87.5	86.7	*94.5	*83.2	*80.0	*72.3	*71.0	*71.0	76.5	88.4
	Canada	100.0	152.9	119.2	97.8	107.0	102.4	108.1	104.2	87.4	85.9	108.5	83.4	83.0	100.7
	United States	100.0	126.9	111.6	95.6	97.3	94.6	101.3	93.7	83.7	89.1	89.8	77.2	79.8	94.6
	American	100.0	100.0	104.0	93.4	87.5	86.7	*94.5	*83.2	*80.0	*72.3	*71.0	*71.0	76.5	88.4
	Single	100.0	152.9	119.2	97.8	107.0	102.4	108.1	104.2	87.4	85.9	108.5	83.4	83.0	100.7
	firsts	100.0	126.9	111.6	95.6	97.3	94.6	101.3	93.7	83.7	89.1	89.8	77.2	79.8	94.6
	Average	100.0	92.4	84.1	85.8	83.6	83.7	95.6	104.8	95.4	92.4	93.6	96.3	108.6	113.7
	Window glass—	100.0	100.8	104.0	93.4	87.5	86.7	*94.5	*83.2	*80.0	*72.3	*71.0	*71.0	76.5	88.4
	Canada	100.0	152.9	119.2	97.8	107.0	102.4	108.1	104.2	87.4	85.9	108.5	83.4	83.0	100.7
	United States	100.0	126.9	111.6	95.6	97.3	94.6	101.3	93.7	83.7	89.1	89.8	77.2	79.8	94.6



XI. House Furnishings.														
Kitchen chairs— Canada..... United States.....	100.0	100.0	104.6	113.7	113.7	122.7	127.3	127.3	127.3	127.3	127.3	127.4	131.8	152.8
	100.0	91.3	94.4	96.0	91.6	91.3	98.5	111.2	107.2	105.7	110.4	115.2	115.2	115.2
Average.....	100.0	95.7	99.5	104.9	102.7	107.0	110.1	119.3	117.3	116.5	118.9	123.5	134.0	134.0
Kitchen tables— Canada..... United States.....	100.0	100.0	107.1	107.1	125.0	125.0	125.0	125.0	125.0	125.1	125.0	134.0	147.9	147.9
	100.0	100.0	100.0	100.0	100.0	100.0	105.8	115.4	115.4	128.2	134.6	140.1	140.1	140.1
Average.....	100.0	100.0	103.6	103.6	113.0	112.5	115.4	120.2	120.2	126.7	129.8	140.1	147.0	147.0
Bedroom sets— Canada.....														
	100.0	98.3	95.0	90.8	100.2	90.3	90.3	93.5	90.3	90.3	90.3	90.3	92.3	98.0
United States.....														
Average.....	100.0	100.0	104.4	108.2	108.9	109.8	115.2	128.9	126.0	124.6	136.0	157.5	174.7	206.2
Tumblers— Canada..... United States.....	100.0	99.2	99.7	99.5	104.6	100.1	102.8	111.2	108.2	107.5	113.2	123.9	133.5	152.1
	100.0	100.0	100.0	100.0	92.0	88.1	88.1	88.1	96.0	76.0	82.8	84.0	84.0	84.0
Average.....	100.0	99.8	102.8	98.1	88.8	83.3	83.3	83.3	73.6	74.6	66.7	61.1	61.1	66.7
Cups and saucers— Canada..... United States.....	100.0	99.8	101.4	99.1	90.4	85.7	85.7	85.7	84.8	75.3	74.8	72.6	72.6	75.4
	100.0	100.0	100.0	100.0	100.0	102.2	111.3	115.9	118.2	115.9	115.9	116.0	123.3	105.6
Average.....	100.0	105.2	105.2	103.0	102.0	94.7	94.7	94.7	94.7	95.4	95.4	95.4	95.4	95.6
Dinner sets— Canada..... United States.....	100.0	102.6	102.6	101.5	101.0	98.5	103.0	105.3	106.5	105.3	105.7	105.7	109.4	130.8
	100.0	100.0	100.0	102.0	98.8	98.8	96.2	97.4	101.2	95.0	94.9	95.0	100.3	134.3
Average.....	100.0	105.5	105.5	168.3	106.8	100.0	100.0	100.0	97.6	97.7	98.3	98.3	98.3	98.5
Table cutlery— Canada.....	100.0	102.8	102.8	104.3	102.8	99.4	98.1	98.7	99.4	96.4	96.6	90.7	99.3	116.4
United States.....	100.0	100.0	100.0	100.0	102.5	102.5	102.5	110.6	98.3	86.1	86.0	86.1	89.9	90.1
Average.....	100.0	106.6	106.6	106.6	109.2	109.5	103.9	111.7	96.3	86.6	80.5	86.6	91.0	95.1

\*Changed back to original basis.

WHOLESALE PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES, 1900-1913—Continued.

Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
XI. House Furnishings—(con.) Pails—															
	Canada.....	100-0	100-0	83-7	85-3	95-1	97-5	100-0	100-0	100-0	100-0	100-0	100-0	100-0	102-0
	United States.....	100-0	103-8	103-8	106-4	113-9	113-9	113-9	132-0	140-7	128-5	127-3	117-2	117-2	120-1
	Average.....	100-0	101-9	93-8	95-9	104-5	105-7	107-0	116-0	120-4	114-3	113-7	108-6	108-6	111-1
Tubs—															
	Canada.....	100-0	88-6	86-5	89-4	107-1	104-9	101-2	101-6	103-5	102-0	98-9	98-9	98-9	98-9
	United States.....	100-0	100-6	100-6	100-6	100-6	100-6	100-6	111-0	114-5	114-5	111-9	114-5	111-0	116-9
	Average.....	100-0	94-6	98-6	95-0	103-9	102-8	100-9	106-3	109-0	108-3	105-4	106-7	105-0	107-9
XII. Drugs and Chemicals—															
	Alcohol, grain—														
	Canada.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	103-4	100-0	100-5	93-0	100-2	108-0
	United States.....	100-0	103-0	100-8	100-4	102-0	101-7	103-3	105-7	110-5	109-7	107-0	106-1	107-7	104-7
France.....															
	Canada.....	100-0	79-0	98-0	119-0	122-0	126-0	118-0	119-0	122-0	115-0	145-0	173-0	165-0	118-0
	Average.....	100-0	94-0	99-6	106-5	108-0	109-2	107-1	108-2	112-0	108-2	117-5	124-0	124-3	110-2
	Alcohol, wood—														
Canada.....															
	United States.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	95-8	62-2	60-0	59-6	59-6	59-6	59-6
	Average.....	100-0	76-5	80-2	73-9	73-4	84-4	87-5	49-9	53-4	62-5	62-5	62-5	62-5	59-8
	Refined, 95 p.c.....														
Alum—															
	Canada.....	100-0	88-3	90-1	87-0	86-7	92-2	93-8	72-9	57-8	61-3	61-1	61-1	61-1	59-7
	United States.....	100-0	99-9	108-6	108-6	108-6	108-6	108-6	108-6	108-6	116-6	112-2	112-1	112-1	120-9
	Lumps.....	100-0	100-0	100-0	98-9	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0
Average.....															
	Canada.....	100-0	100-0	104-3	103-8	104-3	104-3	104-3	104-3	104-3	103-3	101-1	101-1	101-1	110-5
	United States.....	100-0	92-6	92-6	96-3	111-1	111-1	111-1	111-1	125-9	111-1	111-1	148-2	140-4	139-1
	Crystal.....	100-0	101-6	88-7	79-0	89-7	76-6	96-6	102-5	105-3	105-3	105-3	105-3	105-3	105-3
Borax—															
	Canada.....	100-0	97-1	90-7	87-7	100-4	93-9	103-9	106-8	115-6	108-2	108-2	126-8	120-1	119-0
	United States.....	100-0	97-1	90-7	87-7	100-4	93-9	103-9	106-8	115-6	108-2	108-2	126-8	120-1	119-0
	Average.....	100-0	97-1	90-7	87-7	100-4	93-9	103-9	106-8	115-6	108-2	108-2	126-8	120-1	119-0



Commodity.	Description.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<b>XII. Drugs and Chemicals—(con.)</b>															
Quinine—															
Canada.....	100-0	92-9	92-3	88-3	82-9	76-9	76-9	72-6	72-6	72-6	49-2	72-9	64-2	69-1	80-0
United States.....	100-0	91-0	77-5	75-9	70-1	63-2	63-2	49-9	53-4	47-1	42-3	42-1	42-1	53-1	66-0
(American).....															
Average.....	100-0	99-2	84-9	82-0	76-5	70-1	70-1	61-3	63-0	59-9	45-8	57-5	53-2	61-1	73-3
<b>Sulphuric acid—</b>															
Canada.....	100-0	100-0	100-0	100-0	139-9	150-0	150-0	150-0	150-0	150-0	150-0	150-0	225-1	225-1	225-1
United States.....	100-0	104-2	108-4	105-9	107-5	103-3	103-3	83-4	83-4	85-0	83-4	83-4	83-4	83-4	83-4
France.....	100-0	100-0	100-0	93-4	87-0	87-0	87-0	105-4	115-2	115-2	115-2	118-5	118-5	117-4	108-7
Average.....	100-0	101-4	102-8	99-8	111-5	113-4	113-4	112-9	116-2	116-7	116-2	117-3	142-3	142-0	139-1
<b>Soda, bicarbonate of—</b>															
Canada.....	100-0	90-0	86-9	86-9	86-9	86-9	86-9	86-9	86-9	86-6	81-6	85-9	86-0	85-9	62-0
United Kingdom.....	100-0	104-8	103-2	103-2	103-2	103-2	103-2	103-2	103-2	98-4	98-4	98-4	91-9	85-5	76-6
Crystals.....															
Average.....	100-0	97-4	95-1	95-1	95-1	95-1	95-1	95-1	95-1	92-5	90-0	92-2	90-0	85-7	69-3
<b>XIII. Miscellaneous.</b>															
<b>(b) Liquors and Tobacco—</b>															
<b>Hops—</b>															
Canada.....	100-0	59-8	87-9	124-8	158-5	151-5	151-5	95-4	82-4	67-9	163-6	144-8	155-4	173-0	138-4
New Zealand.....	100-0	100-0	84-5	79-8	79-8	79-8	79-8	79-8	79-8	79-8	79-8	59-5	217-0	204-0	163-0
Germany.....	100-0	90-0	98-0	153-0	184-0	119-0	119-0	80-0	87-0	60-0	108-0	158-0	217-0	204-0	163-0
Russia.....	100-0	106-2	105-2	129-8	168-2	142-0	142-0	112-9	114-1	109-4	114-9	155-6	177-8	.....	.....
Average.....	100-0	89-0	93-9	121-9	147-6	123-1	123-1	92-0	90-8	79-3	116-6	129-5	155-0	159-2	127-4
<b>Malt—</b>															
Canada.....	100-0	100-0	98-6	98-6	101-4	102-7	102-7	102-7	150-7	123-3	123-3	123-3	136-0	162-2	125-7
United States.....	100-0	114-0	121-2	110-9	103-3	94-1	94-1	99-0	158-3	142-7	120-3	135-6	196-2	170-1	118-9
Russia.....	100-0	106-1	109-8	109-9	108-1	118-6	118-6	142-1	166-4	153-9	139-8	132-9	142-6	.....	.....
Average.....	100-0	106-7	109-9	106-5	104-3	105-1	105-1	114-6	158-5	140-0	127-8	130-6	158-3	163-0	120-1
<b>Whisky—</b>															
Canada.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	121-1	121-1	121-1	121-1	121-1	121-1
United Kingdom.....	100-0	97-7	73-8	86-6	102-9	122-4	122-4	100-3	104-9	105-5	101-5	100-3	94-2	105-8	104-7
Foreign spirits.....	100-0	100-0	100-0	100-0	101-0	100-0	100-0	100-0	100-0	100-0	103-0	103-0	.....	.....	.....
New Zealand.....	100-0	99-2	138-9	143-3	101-3	107-5	107-5	100-1	101-6	108-9	108-5	108-1	104-9	111-4	110-8
Average.....	100-0	99-2	138-9	143-3	101-3	107-5	107-5	100-1	101-6	108-9	108-5	108-1	104-9	111-4	110-8

Ale—	100-0	100-0	108-2	108-2	108-2	108-2	108-2	108-2	102-2	102-2	96-7	93-9	93-9
Canada.....	100-0	100-0	108-2	108-2	108-2	108-2	108-2	108-2	102-2	102-2	96-7	93-9	93-9
New Zealand.....	100-0	100-0	101-9	101-9	102-8	101-9	105-1	105-5	103-2	103-8	99-2	96-3	96-3
Average.....	100-0	100-0	105-1	105-5	105-5	105-1	105-1	105-5	106-0	106-0	99-2	96-3	96-3
Tobacco—													
Canada.....	100-0	100-0	107-2	107-6	107-6	107-6	107-6	107-6	107-6	108-9	107-7	107-7	107-7
United Kingdom.....	100-0	105-6	103-5	100-4	92-7	90-2	89-8	89-8	104-3	108-8	113-6	125-3	138-6
United States.....	100-0	105-1	102-4	101-5	106-0	110-6	109-0	109-0	106-0	106-0	99-3	99-3	99-3
Australia.....	100-0	102-1	105-5	105-5	105-5	105-5	105-5	103-4	102-3	102-3	102-3	107-8	107-8
Germany.....	100-0	100-0	86-0	84-0	84-0	85-0	85-0	95-0	112-0	109-0	131-0	111-0	118-0
Average.....	100-0	102-6	100-1	99-2	99-8	99-8	101-0	101-0	106-4	107-4	110-8	110-2	114-8
(c) Sundries—													
Paper—													
Canada.....	100-0	94-9	88-5	83-2	83-2	81-2	81-2	81-2	79-2	79-2	81-9	81-9	89-1
United States.....	100-0	80-4	86-1	90-0	95-0	86-1	77-9	77-9	88-6	88-2	75-4	76-8	80-1
Japan.....	100-0	90-0	90-0	94-0	106-0	110-0	90-0	90-0	100-0	100-0	106-0	106-0	106-0
Average.....	100-0	88-4	88-2	89-1	94-7	92-4	83-0	83-0	89-3	89-1	84-4	88-2	94-0
Rope—													
Canada.....	100-0	97-1	103-8	95-4	96-6	98-7	101-8	101-8	102-0	88-8	70-9	81-9	113-9
United Kingdom.....	100-0	94-9	110-2	92-3	97-4	101-3	106-4	106-4	89-7	62-8	51-3	66-7	81-4
United States.....	100-0	82-7	102-1	86-0	88-8	90-5	94-8	94-8	97-7	76-9	66-0	76-4	111-2
Average.....	100-0	91-6	105-4	91-5	94-3	96-8	101-0	101-0	96-5	76-2	62-7	75-0	102-2
Rubber—													
Canada.....	100-0	86-5	71-6	92-3	110-8	126-6	123-6	123-6	108-3	88-7	113-7	107-2	82-2
United Kingdom.....	100-0	91-8	90-8	101-9	114-0	119-4	120-6	119-3	119-3	107-0	148-7	144-1	107-3
United States.....	100-0	86-6	74-1	92-2	110-8	126-6	123-6	123-6	108-3	88-7	113-1	107-1	82-2
Average.....	100-0	88-3	78-8	95-5	111-9	124-2	122-6	122-6	112-0	94-8	125-3	119-4	90-7
Soap—													
Canada.....	100-0	106-1	108-2	108-2	108-2	108-2	108-2	108-2	130-9	128-7	105-2	111-0	128-8
New Zealand.....	100-0	100-0	119-5	115-5	105-2	105-2	105-2	105-2	124-7	124-7	128-9	128-9	128-9
Average.....	100-0	103-1	113-9	111-9	106-7	106-7	106-7	106-7	127-8	126-7	117-1	123-5	143-3
Starch—													
Canada.....	100-0	108-9	127-5	123-5	120-6	114-7	114-7	114-7	123-5	141-2	121-2	133-4	133-5
United States.....	100-0	106-8	133-6	126-8	108-5	96-7	108-0	108-0	118-9	127-3	95-6	110-3	107-4
Australia.....	100-0	94-7	100-0	102-6	107-8	105-2	105-2	105-2	105-2	105-2	105-2	105-2	105-2
Average.....	100-0	103-5	120-4	117-6	112-3	105-5	109-3	109-3	115-9	124-6	107-3	116-3	114-9



\*The index numbers in this table are from the following sources:—

*Canada*:—"Wholesale Prices, Canada, 1890-1909," Special Report of the Department of Labour, ditto 1910, 1911, 1912, 1913, prices at leading markets.

*United Kingdom*—(1) Sixteenth Abstract of Labour Statistics of the United Kingdom (Cd. 7131) and "Cost of Living of the working-classes" (Cd. 6955) published by the Board of Trade of the United Kingdom, 1913. Prices taken are in the most cases the average import or export declared values as computed from the trade returns of the United Kingdom, but for some articles (e.g., potatoes) contract prices, and for others (e.g., British meat and British wheat, barley and oats) market prices are used. ("Cost of Living of the working-classes." (Cd. 6955) page XLV.)

(2) Sauerbeck, in the "Journal of the Royal Statistical Society" April 1914, continued by the "Statist," London, monthly since 1912. Prices at leading British markets.

(3) "Economist," February 21, 1914. Prices at principal British markets.

*United States*:—"Wholesale Prices" published by the United States Bureau of Labour (Bull. No. 149, May 14, 1914). Prices at leading markets.

*Australia*:—"Prices, Prices Indices and Cost of Living in Australia," Report No. 1, December, 1912, continued in "Trade Unionism, Unemployment, Wages, Prices and Cost of Living in Australia," published by the Commonwealth Bureau of Census and Statistics, April, 1913. Prices taken at Melbourne.

Report No. 2. These reports do not contain index numbers of individual commodities: the numbers appearing in the above table have been calculated from the actual prices.

*New Zealand*:—"The course of prices in New Zealand," by James W. McIlraith, LL.B., Wellington, 1911. Prices at Wellington and Christchurch.

*India*—"Variations in Indian price levels," published by the Commercial Intelligence Department of India, Calcutta, 1913. Prices at leading markets.

*Belgium*:—"Bulletin de L'Institut International de Statistique," Tome xix,—3e Livraison." Index number of M. Maurice Sauveur. Prices at various markets. See also U. K. "Cost of Living of the working-classes," 1912. (Cd. 6955).

*France*:—(1) "Annuaire Statistique de la France," Vol. 31, 1911, published by the Ministre du Travail et de la Prévoyance Sociale; prices at import values. No index numbers are given in this volume: those in the above table have been calculated from the actual prices given therein.

(2) "La Reforme Economique," January 23, 1914—market prices.

*Germany*:—"Vierteljahrshefte Zur Statistik des Deutschen Reichs" (quarterly journal of the Imperial Statistical Office of Germany, part 1, 1914). Prices at various markets; see also "Cost of Living of the working-classes" by the United Kingdom Board of Trade, 1912 (Cd. 6955).

*Holland*:—Compiled from market prices in "Verslagen en Mededeelingen van de Directie van den Landbouw," 1912, No. 4, "Verslag over den Landbouw in Nederland over 1911," by the United Kingdom Board of Trade in "Cost of Living of the working-classes," 1912, (Cd. 6955.)

*Russia*:—Annual Reports issued by the Statistical Department of the Ministry of Commerce and Industry of Russia, as quoted by the United Kingdom Board of Trade in "Cost of Living of the working-classes" 1912, (Cd. 6955). Prices at leading markets.

*Japan*:—Twenty-ninth Statistical Report of the Department of Agriculture and Commerce, Japan, 1913. Prices are the average for a large number of towns in various parts of the country. See also U. K. "Cost of Living of the working-classes" 1912. (Cd. 6955).

NOTE.—The average index numbers for the later years, where the number of countries is less, have been calculated by the "chain" method, e.g., the average 164.2 for bran in 1912 represents, not the average for Canada and Australia, but the per cent change which the numbers for these countries show applied to 142.8, the number for 1911, which was an average for Canada, Australia and Russia.

## RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES

Commodity.	1900	1905	1910	1911	1912	1913
<b>Beef</b>						
Canada.....Sirloin.....	100.0	111.8	138.2	139.6	158.0	171.3
Canada.....Shoulder roast.....	100.0	125.5	130.6	136.7	150.0	161.2
United Kingdom.....	100.0	98.7	113.1	110.4	117.8	120.5
United States.....Sirloin.....	100.0	103.2	125.1	125.1	142.9	159.9
United States.....Shoulder roast.....	100.0	106.3	126.0	126.8	142.3	157.3
Australia.....Sirloin.....	100.0	97.7	97.2	96.3	107.4	
Australia.....Rib roast.....	100.0	96.4	96.4	95.1	99.7	
Austria.....	100.0	108.7	121.5	134.5	144.6	
Hungary.....	100.0	112.0	123.0	144.0		
Belgium.....	100.0	125.9	142.2	150.0	169.9	
Germany in Prussia.....	100.0	113.5	126.2	131.7		
Germany in Bavaria.....	100.0	112.0	128.0	136.0		
Germany in Baden.....	100.0	109.0	122.0	129.0	136.0	
Germany in Wurtemberg.....	100.0	113.0	130.0	138.0		
Italy in Rome.....	100.0	100.0	120.0	130.0	120.0	
Italy in Milan.....	100.0	91.0	121.0	127.0		
Norway.....	100.0	100.0	96.9	98.0		
Average.....	100.0	107.3	121.0	124.0	134.3	145.2

NOTE.—Norway index numbers, on 1901 not 1900 base.  
 Australian index numbers, on 1901 not 1900 base.

<b>Veal</b>						
Canada.....Roast from fore-quarter.....	100.0	113.0	127.0	138.0	153.0	167.0
Austria.....	100.0	115.6	122.9	130.6	154.0	
Hungary.....	100.0	116.0	138.0	164.0		
Germany in Prussia.....	100.0	118.3	141.3	144.4		
Germany in Bavaria.....	100.0	113.0	130.0	133.0		
Germany in Baden.....	100.0	110.0	125.0	128.0	135.0	
Germany in Wurtemberg.....	100.0	112.0	129.0	132.0		
Italy in Rome.....	100.0	98.3	110.0	110.0	100.0	
Norway.....	100.0	96.6	101.1	100.0		
Average.....	100.0	110.3	124.9	131.1	139.4	152.2

NOTE.—Norwegian index numbers, on 1901 not 1900 base.

<b>Mutton</b>						
Canada.....Leg.....	100.0	103.3	142.3	141.5	153.3	162.7
United Kingdom.....	100.0	105.7	104.4	102.3	103.5	110.0
Australia.....Leg.....	100.0	103.5	94.0	90.9	103.0	
Hungary.....	100.0	120.0	142.0	168.0		
Germany in Prussia.....	100.0	116.7	134.9	138.9		
Germany in Baden.....	100.0	113.0	128.0	132.0	138.0	
Germany in Wurtemberg.....	100.0	113.0	131.0	135.0		
Norway.....	100.0	99.0	101.0	100.0		
Average.....	100.0	109.3	122.2	126.1	134.8	143.2

NOTE.—Norwegian index numbers, on 1901 not 1900 base.  
 Australian index numbers, on 1901 not 1900 base.

<b>Pork</b>						
Canada.....Fresh roastings.....	100.0	106.5	139.8	136.5	151.2	166.6
Canada.....Salt.....	100.0	114.6	149.5	144.0	153.2	167.8
United Kingdom.....	100.0	98.3	105.2	101.8	103.3	109.9
United States.....Pork chops.....	100.0	114.8	163.7	156.4	172.5	196.3
Australia.....Leg.....	100.0	98.2	103.3	102.3	111.8	
Austria.....	100.0	120.4	138.0	144.0	149.4	
Hungary.....	100.0	125.0	151.0	165.0		
Belgium.....	100.0	108.8	132.5	136.3	144.4	
Germany in Prussia.....	100.0	119.4	125.6	115.5		

## RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES—Continued.

Commodity.	1900	1905	1910	1911	1912	1913
Pork—Continued.						
Germany in Bavaria.....	100.0	117.0	133.0	124.0		
Germany in Baden.....	100.0	114.0	130.0	127.0	136.0	
Germany in Wurtemberg.....	100.0	119.0	131.0	124.0		
Italy in Milan.....	100.0	111.0	136.0	144.0		
Norway.....Salt.....	100.0	107.2	132.4	129.7		
Average.....	100.0	112.4	133.6	132.2	141.3	160.9

NOTE.—Norwegian index numbers, on 1901 not 1900 base.

Australian index numbers, on 1901 not 1900 base.

Bacon—						
Canada.....Smoked.....	100.0	115.6	157.7	146.7	138.9	168.8
United Kingdom.....	100.0	108.3	135.5	125.7	132.3	144.7
United States.....Smoked.....	100.0	126.3	185.3	178.8	180.4	204.8
Australia.....Middle.....	100.0	95.9	106.7	103.6	113.2	
Austria.....	100.0	142.9	179.0	182.9	177.1	
Hungary.....	100.0	127.0	156.0	156.0		
Belgium.....	100.0	116.5	145.5	144.6	146.3	
Germany in Prussia.....	100.0	112.8	121.8	112.8		
Germany in Baden.....	100.0	104.0	115.0	116.0	119.0	
Italy in Rome.....	100.0	100.0	116.7	100.0	100.0	
Average.....	100.0	114.9	141.9	136.7	138.5	159.0

NOTE.—Australian index numbers, on 1901 not 1900 base.

Lard—						
Canada.....Pure.....	100.0	107.6	148.8	128.9	144.2	140.4
United States.....Pure.....	100.0	110.4	164.8	138.5	147.1	158.8
Austria.....	100.0	119.4	149.3	149.3	149.3	
Hungary.....	100.0	123.0	159.0	159.0		
Italy in Rome.....	100.0	100.0	116.7	100.0	100.0	
Average.....	100.0	113.1	147.7	135.0	141.1	144.9
Eggs—						
Canada.....Fresh.....	100.0	116.7	173.9	177.8	182.8	192.2
Canada.....Packed.....	100.0	115.8	158.4	163.3	175.2	185.1
United Kingdom.....	100.0	98.1	105.7	110.4	114.1	112.5
United States.....Fresh.....	100.0	132.5	159.6	151.6	164.0	176.4
Australia.....	100.0	97.7	111.3	114.2	126.5	
Hungary.....	100.0	118.0	133.0	139.0		
Belgium.....	100.0	110.0	120.0	130.0	130.0	
Germany in Prussia.....	100.0	110.7	119.3	122.5		
Germany in Bavaria.....	100.0	113.0	120.0	127.0		
Germany in Baden.....	100.0	110.0	126.0	128.0	128.0	
Germany in Wurtemberg.....	100.0	109.0	122.0	128.0		
Italy in Rome.....	100.0	100.0	125.0	125.0	125.0	
Norway.....	100.0	107.9	125.0	122.1		
Average.....	100.0	110.7	130.7	133.8	138.3	144.2

NOTE.—Australian index numbers on 1901 not 1900 base.

Norwegian index numbers on 1901 not 1900 base.

Milk—						
Canada.....	100.0	108.2	132.8	127.8	147.5	149.1
United Kingdom.....	100.0	100.0	100.0	103.3	102.0	100.0
United States.....	100.0	108.1	131.6	132.7	135.6	140.2
Australia.....	100.0	101.2	113.9	118.1	124.7	
Austria.....	100.0	107.7	111.5	111.5	111.5	

RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES—*Continued.*

Commodity.	1900	1905	1910	1911	1912	1913
<b>Milk—Continued.</b>						
Hungary.....	100.0	119.0	131.0	144.0	.....	.....
Germany in Bavaria.....	100.0	106.0	113.0	119.0	.....	.....
Germany in Baden.....	100.0	100.0	112.0	118.0	124.0	.....
Germany in Wurtemberg.....	100.0	107.0	127.0	140.0	.....	.....
Italy in Rome.....	100.0	100.0	100.0	100.0	100.0	.....
Norway.....	100.0	100.0	100.0	108.3	.....	.....
Average.....	100.0	105.2	115.7	120.2	124.9	125.9

Note—Australian index numbers, on 1901 not 1900 base.

Norwegian index numbers, on 1901 not 1900 base.

<b>Butter—</b>						
Canada..... Dairy	100.0	111.8	120.3	132.1	144.8	135.7
Canada..... Creamery	100.0	108.6	125.5	136.8	145.1	138.8
United Kingdom.....	100.0	99.1	106.2	108.7	113.8	112.3
United States..... Creamery	100.0	110.1	138.2	129.8	145.7	151.4
Australia.....	100.0	92.3	95.1	95.0	109.3	.....
Austria.....	100.0	113.0	143.9	141.3	150.4	.....
Hungary.....	100.0	118.0	149.0	157.0	.....	.....
Belgium.....	100.0	100.7	109.3	116.2	115.2	.....
Germany in Prussia.....	100.0	106.7	119.2	123.7	.....	.....
Germany in Bavaria.....	100.0	107.0	123.0	131.0	.....	.....
Germany in Baden.....	100.0	108.0	127.0	133.0	137.0	.....
Germany in Wurtemberg.....	100.0	110.0	125.0	130.0	.....	.....
Italy in Rome.....	100.0	102.9	100.0	100.0	100.0	.....
Italy in Milan.....	100.0	101.0	126.0	135.0	.....	.....
Norway.....	100.0	101.0	109.1	110.2	.....	.....
Average.....	100.0	106.0	121.1	125.3	133.2	130.5

Note—Australian index numbers, on 1901 not 1900 base.

Norwegian index numbers, on 1901 not 1900 base.

<b>Cheese—</b>						
Canada..... Old	100.0	109.3	113.0	124.2	131.0	124.2
Canada..... New	100.0	107.8	117.4	130.8	133.5	132.8
United Kingdom.....	100.0	93.5	102.3	106.7	117.3	114.2
Australia.....	100.0	105.7	108.3	106.7	122.7	.....
Hungary.....	100.0	105.0	122.0	127.0	.....	.....
Italy in Rome..... Parmesan	100.0	91.4	100.0	105.7	100.0	.....
Norway.....	100.0	94.1	101.0	102.0	.....	.....
Holland..... Leyden	100.0	102.9	119.4	129.1	139.8	.....
Average.....	100.0	101.2	110.4	116.5	123.4	119.9

Note—Australian index numbers, on 1901 not 1900 base.

Norwegian index numbers, on 1901 not 1900 base.

<b>Bread—</b>						
Canada.....	100.0	105.4	116.2	118.8	116.2	116.2
United Kingdom.....	100.0	109.0	119.5	113.8	119.5	120.3
Australia.....	100.0	100.0	110.3	111.5	117.2	.....
Austria.....	100.0	95.4	133.5	117.1	119.0	.....
Hungary.....	100.0	104.0	136.0	132.0	.....	.....
Belgium.....	100.0	100.0	119.2	115.4	115.4	.....
Germany in Bavaria.....	100.0	100.0	114.0	114.0	.....	.....
Germany in Baden.....	100.0	101.0	118.0	116.0	117.0	.....
Germany in Wurtemberg.....	100.0	110.0	129.0	129.0	.....	.....
Italy in Rome.....	100.0	93.0	98.8	95.3	103.5	.....
Italy in Milan.....	100.0	105.0	119.0	119.0	.....	.....
Average.....	100.0	102.1	119.4	116.5	119.6	120.1

Note—Australian index numbers, on 1901 not 1900 base.

RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES—*Continued.*

Commodity.	1090	1905	1910	1911	1912	1913
Flour—						
Canada.....	100.0	112.0	132.0	136.0	136.0	132.0
United Kingdom.....	100.0	108.5	116.1	112.3	118.5	118.5
United States.....	100.0	125.4	143.7	135.2	140.5	134.7
Australia.....	100.0	112.2	128.7	120.3	121.3	.....
Austria.....	100.0	104.8	134.6	129.7	125.1	.....
Hungary.....	100.0	104.0	137.0	133.0	.....	.....
Germany in Prussia.....	100.0	106.9	127.6	127.6	.....	.....
Germany in Bavaria.....	100.0	100.0	112.0	112.0	.....	.....
Germany in Baden.....	100.0	97.0	108.0	105.0	108.0	.....
Germany in Wurtemberg.....	100.0	100.0	111.0	108.0	.....	.....
Norway.....	100.0	103.0	124.2	118.2	.....	.....
Holland.....Wheat.....	100.0	94.9	109.3	109.3	109.3	.....
Average.....	100.0	157.4	123.7	120.5	122.2	119.4

Note—Australian index numbers, on 1901 not 1900 base.

Norwegian index numbers, on 1901 not 1900 base.

Oatmeal—						
Canada.....	100.0	108.3	113.9	122.2	125.0	119.4
United Kingdom.....	100.0	101.3	111.0	107.1	123.4	129.9
Australia.....	100.0	86.8	102.2	103.7	126.5	.....
Holland.....	100.0	103.4	106.9	114.9	114.9	100.4
Average.....	100.0	99.9	108.5	112.0	122.4	122.9

Note—Australian index numbers on, 1901 not 1900 base.

Rice—						
Canada.....	100.0	101.9	101.9	105.7	103.8	111.5
United Kingdom.....	100.0	92.9	93.4	100.0	111.2	119.6
Australia.....	100.0	104.3	97.5	102.5	108.1	.....
New Zealand.....	100.0	88.9	88.9	111.1	.....	.....
Hungary.....	100.0	96.0	102.0	98.0	.....	.....
Belgium.....	100.0	105.9	111.8	115.7	121.6	.....
Italy in Milan.....	100.0	103.0	119.0	121.0	.....	.....
Holland.....	100.0	100.0	106.4	106.4	106.4	.....
Average.....	100.0	99.1	102.6	107.5	112.9	121.4

NOTE.—Australian index numbers on 1901 not 1900 base.

Beans—						
Canada.....	100.0	109.3	127.9	125.6	141.8	134.8
Hungary.....	100.0	174.0	142.0	163.0	.....	.....
Holland.....	100.0	127.0	133.3	150.0	177.5	.....
Average.....	100.0	136.8	134.4	146.2	169.0	190.8
Starch—						
Canada.....	100.0	101.1	104.5	107.9	107.9	102.2
Australia.....	100.0	106.4	106.4	111.1	113.4	.....
New Zealand.....	100.0	100.0	100.0	100.0	100.0	.....
Average.....	100.0	102.5	103.6	106.3	107.1	101.4
Sugar—						
Canada.....White granulated....	100.0	101.8	102.9	127.7	116.6	101.8
Canada.....Yellow.....	100.0	98.0	106.0	124.0	118.0	108.0
United Kingdom.....	100.0	133.8	127.2	124.6	137.7	116.7
United States.....White granulated....	100.0	98.1	98.7	106.9	104.7	91.7
Australia.....	100.0	107.7	115.0	115.0	125.7	.....
New Zealand.....	100.0	90.9	81.8	90.9	.....	.....



## RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES—Continued.

Commodity.	1900	1905	1910	1911	1912	1913
Sugar—Continued.						
Austria.....	100.0	87.0	95.7	96.7	106.5	.....
Hungary.....	100.0	91.0	99.0	101.0	.....	.....
Belgium.....	100.0	71.2	70.2	71.2	76.9	.....
Germany in Wurtemberg.....	100.0	88.0	95.0	85.0	.....	.....
Norway.....	100.0	117.6	119.6	115.7	.....	.....
Holland.....	100.0	106.9	105.7	103.4	109.2	.....
Average.....	100.0	99.3	101.4	105.2	108.9	113.1

Note.—Australian index numbers on 1901 not 1900 base.

Norwegian index numbers on 1901 not 1900 base.

Tea—						
Canada.....Average black and green.....	100.0	100.0	105.6	106.7	107.1	107.5
United Kingdom.....	100.0	108.6	103.5	103.5	103.5	103.5
Australia.....	100.0	95.8	98.5	98.5	100.0	.....
Holland.....	100.0	100.0	101.0	103.0	105.0	.....
Average.....	100.0	101.1	99.7	102.9	103.9	104.1
Coffee—						
Canada.....	100.0	101.4	104.3	104.3	109.5	108.9
United Kingdom.....	100.0	101.5	101.8	105.3	109.0	109.7
Australia.....	100.0	101.7	101.6	102.2	106.5	.....
Hungary.....	100.0	95.0	95.0	99.0	.....	.....
Belgium.....	100.0	99.6	105.7	121.0	131.4	.....
Baden.....	100.0	90.0	99.0	104.0	109.0	.....
Norway.....	100.0	97.5	105.1	121.7	.....	.....
Holland.....	100.0	90.5	104.0	117.5	128.3	.....
Average.....	100.0	97.1	102.1	109.4	115.9	115.9

Note.—Australian index numbers on 1901 not 1900 base.

Norwegian index numbers on 1901 not 1900 base.

Potatoes—						
Canada.....	100.0	116.1	122.3	195.4	152.5	153.0
United Kingdom.....	100.0	80.3	76.9	95.1	95.9	96.6
United States.....Irish.....	100.0	117.8	128.8	169.2	181.2	162.9
Australia.....	100.0	121.2	107.2	126.7	162.1	.....
Austria.....	100.0	119.0	150.0	140.0	140.0	.....
Hungary.....	100.0	143.0	129.0	157.0	.....	.....
Belgium.....	100.0	133.3	122.2	144.4	133.3	.....
Germany in Prussia.....	100.0	120.0	160.0	200.0	.....	.....
Germany in Bavaria.....	100.0	127.0	128.0	163.0	.....	.....
Germany in Baden.....	100.0	125.0	155.0	187.0	175.0	.....
Germany in Wurtemberg.....	100.0	123.0	184.0	197.0	.....	.....
Norway.....	100.0	95.0	115.0	145.0	.....	.....
Average.....	100.0	118.4	131.5	160.0	160.0	154.9

Note.—Australian index numbers on 1901 not 1900 base.

Norwegian index numbers on 1901 not 1900 base.

Vinegar—						
Canada.....	100.0	100.8	100.8	102.6	105.8	104.1
New Zealand.....	100.0	100.0	100.0	100.0	.....	.....
Hungary.....	100.0	114.0	104.0	102.0	.....	.....
Average.....	100.0	104.9	101.6	101.5	104.6	102.9

RETAIL PRICES—INDEX NUMBERS FOR VARIOUS COUNTRIES—*Continued.*

Commodity.	1900	1905	1910	1911	1912	1913
<b>Coal—</b>						
Canada..... Anthracite Stove size.....	100-0	114-4	119-0	115-7	140-7	134-5
Canada..... Bituminous.....	100-0	103-6	122-4	116-6	129-2	101-9
United Kingdom..... Mean of Derby Brights, kitchen and nuts.....	100-0	78-4	83-8	85-1	87-0	90-7
Austria.....	100-0	87-9	101-6	101-1	100-0	.....
Hungary.....	100-0	96-0	130-0	129-0	.....	.....
Norway.....	100-0	78-4	78-0	89-2	.....	.....
Average.....	100-0	93-2	105-8	106-1	115-0	106-8

NOTE.—Norwegian index numbers on 1901 not 1900 base.

<b>Wood—</b>						
Canada..... Average hard and soft.....	100-0	110-7	133-6	130-8	136-1	133-6
Hungary.....	100-0	93-0	120-0	125-0	.....	.....
Norway.....	100-0	94-0	118-1	118-1	.....	.....
Average.....	100-0	99-2	123-9	124-6	129-7	127-4

NOTE.—Norwegian index numbers on 1901 not 1900 base.

<b>Coal oil—</b>						
Canada.....	100-0	102-0	99-1	96-6	99-1	99-1
Australia.....	100-0	80-7	87-2	88-3	91-8	.....
New Zealand.....	100-0	71-4	76-2	76-2	.....	.....
Austria.....	100-0	104-2	95-8	100-0	95-8	.....
Norway.....	100-0	89-0	91-8	86-3	.....	.....
Average.....	100-0	89-5	90-0	89-5	90-2	90-2

NOTE.—Australian index numbers on 1901 not 1900 base.  
Norwegian index numbers on 1901 not 1900 base.

\*The index numbers in this table are from the following sources:—

*Canada.*—Compiled from statistics published monthly since 1910 in the *Labour Gazette*. See also section—above. Prices are averages for 57 localities.

*United Kingdom.*—"Cost of Living of the Working-classes," 1912, (Cd. 6955), and Sixteenth Abstract of Labour Statistics of the United Kingdom," (Cd. 7131); published by the United Kingdom Board of Trade, 1913. Prices at London.

*United States.*—"Retail Prices," Reports by the Bureau of Labour of the United States (Bull. No. 140, Feb. 10, 1914). Prices are averages for 39 cities.

*Australia.*—"Prices, Price Indexes, and Cost of Living in Australia," Dec., 1912, continued in "Trade Unionism, Unemployment, Wages, Prices, and Cost of Living in Australia," April, 1913, Report No. 2. The numbers appearing in the above table are compiled from the actual prices averaged for six Metropolitan cities.

*Austria.*—Compiled by the United Kingdom Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955) 1912, from Vienna prices in "Mittelungen der Statistischen Abteilung des Wiener Magistratz," published by the Municipality of Vienna.

*Hungary.*—Compiled by the United Kingdom Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955), 1912, from prices in 22 towns in Hungary, pub-

lished by the Central Statistical Office of Hungary in the Statistical Year Book of that Department.

*Belgium.*—"Revue du Travail," published by the Belgium Labour Department; prices in 16 principal towns. No index numbers are given, but the British Board of Trade has compiled those in the above table in "Cost of Living of the Working-classes," (Cd. 6955); 1912.

*Germany.*—Compiled by the United Kingdom Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955), 1912, from statistics published by the governments of Prussia, Bavaria, Baden and Wurtemberg.

*Holland.*—"Maandachrift van het Central Bureau voor de Statistiek," the official journal of the Dutch Labour Department, quoted by the British Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955), 1912. Prices at Co-operative stores in Amsterdam, Haarlem, Arnhem, Utrecht, Leeuwarden and the Hague.

*Italy.*—Compiled by the United Kingdom Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955), 1912, from prices in Milan, published in "Dati Statistici del Commune di Milano," by the municipality of Milan.

*Norway.*—Compiled by the British Board of Trade in "Cost of Living of the Working-classes," (Cd. 6955), 1912, from prices in Christiania, published by the Municipal Statistical office of Christiania in "Statistisk Aorbok for Kristiania By."

(See note on chain method in footnote to preceding table.)

## APPENDIX No. 5.

*Exhibit contributed by Department of Labour, Canada, through Mr. R. H. Coats.*

## PRICES OF SERVICES.

Under the above somewhat loose heading, statistics are assembled on the following: (1) The price of water, usually a municipal service. (2) and (3) The price of electric lighting and of illuminating and fuel gas; these are usually though not invariably supplied by the municipality. (4) Railway freight rates. (5) The tariffs charged by hospitals. The first four are in Great Britain usually included under the term "rates." In all the consideration for which the charge is paid is of the nature of a service rendered rather than of a commodity received, though no hard and fast line can be drawn. Custom and regulation play a considerable part in the fixing of charges of this nature, and for this and other reasons it is of interest to examine their general trend.

## WATER SERVICE, 1900-1913.

In the accompanying table will be found returns showing the cost of water service in 74 localities for the years 1900-1913, the results of an investigation including places of 5,000 and over in Canada, 80 in all.<sup>1</sup> The information was obtained in each case from the civic authorities, for whose assistance acknowledgment is hereby made. The statements of costs in the table are necessarily restricted in scope; in each case what are regarded as the most salient items only were selected as representing the price of the service as a whole. The purpose throughout was to reflect domestic expenditures, though commercial rates are indicated to some extent.

The compilation of the table was rendered difficult by the great variety which obtains in the manner of quoting services. Such widely divergent methods as the following were encountered:— rate by number of rooms, by number of residents, and by a combination of these two; a rate based on the assessed valuation of the property, on the real value, and on the rental valuation; a rate according to various uses of property and machinery; a rate according to the number of cows, horses, carriages, as well as the more familiar lawn-sprinkling and window-cleaning services; a meter rate by gallon of water consumed and by size of meter, and a meter and flat rate combined; all with varying extras, sliding scales, and discounts, frequently varying according as the property is residential, commercial or manufacturing.

(It may be noted that there has been a tendency toward simpler and more uniform schedules, bodies like the Hydro-Electric Commission of Ontario and the Public Utilities Commission of Nova Scotia having used their efforts to this end.) A large number of civic charters, manuals, by-laws, and schedules, had to be examined, in some cases over each year of the period, for the data embodied in the table. Under these circumstances detailed comparison between the various localities cannot be made from

<sup>1</sup> According to the Commission of Conservation's Report on the Water Works of Canada, compiled by Mr. Leo. G. Denis, B.Sc., there were in 1912, 348 such plants, of which 276 were municipally owned. Their total cost was \$95,566,496, and their annual cost of maintenance, exclusive of interest, was \$3,435,199. The daily consumption of water per capita was estimated at 113 Imperial gallons, and the annual cost per capita at \$4.12, at about 10 cents per 1,000 gallons. In 1900 there were only 266 water works plants in Canada.

the table, and in many cases, where decided changes in the method have taken place, the trend from year to year, the main purpose of the compilation, could be only roughly indicated.

The general results of the the investigation according to provinces are set forth in the subjoined table of index numbers. On the whole, the price of water-service has tended to decline somewhat, the simple average of all the localities showing a decrease of 4.4 per cent. There are a few instances of a rise, but in the great majority of cases conditions have either been stationary or downward. Of 70 records over three years and longer, 19 show decreases as between the beginning and end, 39 remain stationary, 8 increased their rates and 4 show alternating reductions and advances. The highest rise shown is 51 per cent and the largest decline 52 per cent.

Of the ten towns in Nova Scotia with practically continuous records throughout the period 1900-1913, one town is responsible for the slight rise shown between 1902 and 1905, and two for the final decline. In New Brunswick, the two towns remained unchanged until 1908, when one declined. In Quebec, the nine towns remained stationary until 1908, and five throughout.

In Ontario, with 29 towns, the decreasing trend was gradual from 1901 to 1913, and the fall is lower by several points than in Quebec. In Manitoba, four towns are included in the survey, in Saskatchewan three, in Alberta four, and in British Columbia five, but only six records cover the entire period. The phenomenal drop of 60 per cent in Winnipeg rates in 1903-04 is overborne by a heavy increase at Brandon in 1907.

The meter rate with a minimum supply basis, is apparently growing in favour as encouraging building and sanitary improvements, as tending to eliminate waste and to conserve costs, and as making for fairness between large and small consumers.<sup>1</sup> Competent authorities estimate that from 25 to 60 per cent of all water supplied on an unmetered basis is wasted.

As already explained the data here presented are insufficient to warrant comparisons or to estimate the fairness of rate. Factors in the latter are cost of installing pipes, the method of operation, whether by power or gravity, the method of imposing charges and the nature of the ownership.

For such data the reader is referred to the Report of the Commissioners of Conservation already cited.

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<sup>1</sup> Large consumers get the benefit of the low cost per 1,000 gallons which goes with a large output from the plant.



## WATER SERVICE, 1900-1913—INDEX NUMBERS.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Nova Scotia.....	100.0	100.0	100.1	100.1	100.1	100.2	96.8	96.8	97.0	99.7	99.7	99.5	97.8	97.8
New Brunswick.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	87.5	87.5	87.5	87.5	87.5	87.5
Quebec.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	96.3	98.5	96.7	96.7	96.7	97.5
Ontario.....	100.0	100.0	99.3	98.8	97.3	96.9	96.7	96.4	96.6	96.9	96.5	94.7	94.0	92.9
Manitoba.....	100.0	100.0	100.0	87.1	69.3	79.5	79.5	102.7	102.7	99.0	99.0	99.0	99.0	107.5
Saskatchewan.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	91.6	91.6	91.6	83.3
Alberta.....	100.0	100.0	90.0	100.0	100.0	100.0	100.0	100.0	100.0	112.5	119.9	111.9	111.9	111.9
British Columbia.....	100.0	100.0	90.0	90.0	90.0	90.0	90.0	93.3	93.3	95.0	95.0	95.0	95.5	91.6
Canada.....	100.0	100.0	99.3	98.6	97.2	97.1	96.5	97.7	96.9	98.4	98.0	96.7	96.2	95.6

## THE PRICE OF WATER SERVICE, 1900-1913.

Province.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Nova Scotia.</i>								
Amherst.....**	1st tap \$5, each additional \$1, bath \$1, w.c. \$3, meter sliding scale 15c. 1st 1,000 gallons.	*	*	*	*	*	*	*
Dartmouth***	42c. for kitchen, bath and basin; w.c. \$3 additional.	*	45c. for kitchen bath and basin, w.c. \$3 ad- * *	*	*	48c. for kitchen bath and basin, w.c. \$3 ad- * *	*	*
Glace Bay.....	House 1st tap \$6, sliding scale down to \$1 for additional taps; bath \$2, w.c. \$3, lawn \$2 up; commercial 1st tap \$10, etc.	*						
New Glasgow.....	Flat rate house minimum \$5 with 50c. additional for each additional room and inmate; bath \$2.50, w.c. \$2.50, basins and extra taps 50c.	*	*	*	*	*	*	*
North Sydney.....	House, flat rate \$5 for 1st tap, \$2 for each additional; mfg. sliding scale.	*	*	*	*	*	*	*
Springhill.....	Single tap \$6, extra taps \$2, w.c. \$4, bath \$4.	*	*	*	*	*	*	*

## THE PRICE OF WATER SERVICE, 1900-1913.

Province.	1908	1909	1910	1911	1912	1913
<i>Nova Scotia.</i>						
Amherst.....	*	1st tap \$5, each addition- al \$1, bath \$2, w.c. \$3, meter sliding scale 15c. 1st M gal.	*	*	*	*
Dartmouth.....	55c. for kit- chen, bath and basin, w.c. \$3 additional.		*	50c. for kit- chen, bath and basin, w.c. additional.	50c. for kit- chen, bath and basin, w.c. \$2.50 addit'nal	*
Glace Bay.....	*	*	*	*	*	*
New Glasgow.....	*	*	*	*	*	*
North Sydney.....	*	*	*	*	*	*
Springhill.....	*	*	*	*	*	*

\*Same as in preceding year. \*\*Private house rate, boarding-houses, saloons, etc., higher rate. \*\*\*Rate on minimum value of \$800 house; maximum \$2,000  
 Town clerk says works out at \$3.20, with \$5.70 for w.c.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
<i>Nova Scotia—Con.</i>								
Sydney.....	1st tap \$5 per annum, bath \$3, w.c. \$3.50, lawn \$2 up.	*	*	*	*	*	*	*
Sydney Mines.....					Sink tap \$4 per yr., w.c. \$2.50, bath \$1.50, basin \$1.50.	*	*	*
Truro.....	Flat rate house and stores \$6-\$10 per year, meter rate 8c. per M gal	*	*	*	*	*	*	*
Yarmouth.....	1st tap \$9.....	*	*	*	*	*	\$6.00	*
<i>New Brunswick.</i>								
Fredericton.....	Meter rate 25c. per M gal., flat rate minimum \$5 for 1 tap.	*	*	*	*	*	*	*
St. John.....	House flat rate \$4 for 1st family, \$1 each additional; meter sliding scale 2½c. per 100 gal. to ¼c. per 100 gal. in large quantities according to consumption.	*	*	*	*	*	*	*
<i>Quebec.</i>								
Chicoutimi.....	House 1st tap \$8, each additional \$1, bath and w. c. \$3; w. c. only \$2, lawn sprinkling \$2.	*	*	*	*	*	*	*
Fraserville.....	Dwelling sliding scale, min. \$7, max. \$20 and w. c. \$2, bath \$2, additional rates for hotels, mgs. etc.	*	*	*	*	*	*	*
Hull.....	House by values sliding scale up to \$100, \$9 per annum, \$300 to \$600, \$12; \$1,600 to \$2,000, \$20; hotels, factories St. sprinkling additional.....	*	*	*	*	*	*	*
Joliette.....	On renting value of \$20 per annum \$5 per annum and additional 75c for each additional \$10 of renting value, and w. c. \$2; bath, \$1.....	*	*	*	*	*	*	*

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908.	1909.	1910.	1911.	1912.	1913.
<i>Nova Scotia—Continued.</i>						
Sydney.....	*	*	*	*	*	*
Sydney Mines.....	*	*	*	*	*	*
Truro.....	*	*	*	*	*	*
Yarmouth.....	*	\$7 50	*	*	*	*
<i>New Brunswick.</i>						
Fredericton.....	*	*	*	*	*	*
St. John.....	House flat rate \$3 per family, meter sliding scale 2½c. per 100 gal. to ½c. per 100 gal. in large quanti- ties.	*	*	*	*	*
<i>Quebec.</i>						
Chicoutimi.....	*	*	*	*	*	House 1st tap \$8, each addi- tional \$2, bath and w.c. \$3; w.c. only \$2; lawn sprink- ling, \$2.
Fraserville.....						
Hull.....	*	*	\$5 per ann. on renting value of \$40, \$5.75 on balance up to \$50 per an- num, w.c. \$2, bath \$1.	*	*	*
Joliette.....	*	*		*	*	*

\*Same as in preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Quebec—Con.</i>								
Lachine.....	Sliding scale, \$6 per annum on 1st \$30 rental and 75c. on each additional \$10 rental.....	*	*	*	*	*	*	*
Levis.....	7½% assessed rental.....	*	*	*	*	*	15% of rental.	*
Montreal.....	\$6-\$22 per annum.....	*	*	*	*	*	*	*
St. Hyacinthe.....	House 4 rooms and under (1 family) 1 tap \$5 and sliding scale up, bath, \$3, w.c. \$2, lawn \$3 up, also commercial flat and meter rate.....	*	*	*	*	*	*	5
Sorel.....	On rent value below \$30, \$5 per annum, for additional each \$10 rental value 75c.....	*	*	*	*	*	*	*
Three Rivers.....	House (1 family) valued at \$600, \$5; for each additional \$100, 50c. up to \$3,000, then 50c. for each additional \$500, also rates for hotels, etc., meter rate and rents.....	*	*	*	*	*	*	*
Valleyfield.....	House (1 family) of \$30 annual rent value \$5 scale up; w.c. \$4, private bath free, hotels, stores, etc., other flat and meter rates.....	*	*	*	*	*	*	*
Westmount**.....	4-10 per cent.....	*	*	*	*	*	*	*
<i>Ontario.</i>								
Barrie.....	House 5 rooms \$5.56 per annum for 1 tap, over 5 rooms \$6.67, bath \$3.33, w. c. \$3.33, lawn \$2.50 up, 10% disc., minimum \$5 net, also commercial and meter rates, 500 gals. per day 33c. per 1,000 gals., over 20,000 11c	*		*	*	*	*	*



THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1903	1909	1910	1911	1912	1913
<i>Quebec—Continued.</i>						
Lachine.....	6½% on rental	*	6% on rental	*	*	*
Levis.....	*	*	*	*	12½%	*
Montreal.....	5%	*	*	*	1½% of	*
Quebec.....	*	*	*	*	real value.	*
St. Hyacinthe.....	*	*	*	*	*	*
Sherbrooke.....	*	*	*	*	*	*
Sorel.....	*	*	*	*	*	*
Three Rivers.....		On rent value				
Valleyfield.....	*	below \$30, \$6,	*	*	*	*
Westmount.....	*	for each addi-	*	*	*	*
	*	tional \$10.75.	3.11% **			
<i>Ontario.</i>						
Barrie.....	*	House single	*	*	*	*
		tap \$4 each				
		additional tap				
		80c., bath \$2,				
		w.c. \$2.50, etc.				
		also commer-				
		cial rates less				
		10%. Meter				
		rate up to 50				
		gals. per day				
		26c. per M gals.				
		to 17c. per M				
		gals. for 10,000				
		and over less				
		20%. Min. flat				
		rate \$3.60 net.				

\* Same as in preceding year.

\*\* On assessed annual values from \$100 to \$1,000 per annum.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Berlin .....	Flat rate single tap \$4.50, full plumbing and lawn \$17, meter minimum—\$9.27c. per 1,000 gals. net.	*	Flat rates \$4 and \$15.20, and meter \$8 and 24c.	Flat rate \$4 and \$15.20, meter \$7 and 21c.	*	*	*	*
Brantford.....	House 4 rooms \$1.87, 5 rooms \$3.13, 7 rooms \$3.75, 8 rooms \$5.00 W.c. and bath \$6.25, stationary wash-tub \$3, each additional faucet when consumption is increased \$1.25. House sliding scale, minimum 4 rooms, 4 inmates \$7, bath \$3, w.c. \$4, sprinkling minimum \$3, disc. 47%, commercial and mfg. rates, 30c. per M gallons.	*	*	*	*	*	*	*
Brockville.....	Sliding scale, 4-12 room houses, 4 rooms \$3.50, bath \$1 and w.c. \$1 additional, lawn sprinkling \$1.25 up, also meter rate 15c. per M gallons and commercial rates.	*	*	*	*	*	*	*
Chatham.....	1st tap, \$6, each additional \$1, w.c. \$3.50, bath \$3 in advance.	*	*	*	*	*	*	*
Cobalt.....								
Collingwood.....								
Cornwall.....							1st tap \$6.00, each additional \$1, w.c. \$3.50, bath \$3, disc. 10%.	
<i>Ft. William.....</i>								
Guelph.....	Flat rate minimum 4 room house \$8 per annum and bath, \$3: w. c. \$3: meter rate for large consumers 25c. to 5c. per M, less 10% discount. Minimum 4 room house \$4.50 per annum each additional room 65c., bath \$3.50, w.c. \$3.50, lawn \$2.50 up. Discount 20%. Hotel and barbers additional rates, also stables. House 6 rooms \$5, over 6 rooms \$7, lawn \$2 up, also commercial and meter 100 cu. ft. a day 20c. scaling down 1600, 12c. Less 25%.	*	*	*	*	*	*	*
Galt.....		*	*	*	*	*	*	*

Locality.	1908	1909	1910	1911	1912	1913
<i>Ontario—Continued.</i>						
Berlin.....	*	*	Flat rate for 1 tap only. All other meter \$5.70 and 18c. Min. per M gallons net.	*	Flat rate for 1 tap only. Meter \$4.50 and 18c.	*
Brantford.....	*	*	*	*	*	*
Brockville.....	*	*	*	*	*	*
Chatham.....	*	*	*	*	*	*
Cobalt.....	*	House \$24 per annum, horse \$12 Hotels, etc. higher rate.	*	House 5 room \$15, each additional room \$1.80.	House 5 rooms \$15, bath \$3, horse \$3, horse additional \$1.44, bath or w.c. \$3, horse, \$6. Discount 25%.	House 5 rooms \$12, each additional \$1.44, bath or w.c. \$3, horse, \$6. Discount 25%.
Collingwood.....	*	*	*	*	*	*
Cornwall.....	*	*	*	*	1st tap \$6, each additional \$1, w.c. \$3.50 bath \$3.4 Discount 20%.	*
Ft. William.....	*	*	*	*	*	*
Guelph.....	*	Minimum 4 room house \$4.50 per annum, each additional room 65c., bath \$3-50, w.c. \$3.50, lawn \$2.50 up. Discount 30%.	*	Minimum 4 room house \$4.50 per annum, each additional room 65c., bath \$3.50, w.c. \$3.50, lawn \$2.50 up. Discount 40%.	*	*
Galt.....	*	Hotels, bars, stables and additional rates.	*	Hotels, bars, stables and additional rates.	*	*

\*Same as preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Hamilton.....	Flat rate houses, stores, etc., sliding scale, property assessed at \$800, 75c. per quarter and 5c. additional for each \$100 extra assessed; w.c. 50c. also additional rates for bars, etc., and meter rate for large consumers.	*	*	*	*	*	*	*
Kenora....	Sliding scale house 4 rooms, \$2.95 per qr. each additional room 40c., bath, \$1, w.c. \$1, basin 30c. Hotels etc. 20 rooms, each room 55c. per qr.; each additional 35c.; 1st bath \$1.50; 1st w.c. \$1.75; each basin 85c. Other commercial rates.	*	*	*	*	*	*	*
Kingston.....	Sliding scale house up to \$500 assessment \$3.75; up to \$10,000 \$17.75; bath \$1.25; w.c. \$2.50 (lawn 1st M sq. ft. \$1 net) disc 20% also fixed commercial rates. Meter 1M to 50M cu. ft. 30c per M-6c., disc. 10-25%. Minimum per quarter \$2.50.	*	*	*	*	*	*	*
London.....	House flat rate 3 rooms \$5; each additional room 75c.; w.c. \$3.50, bath \$4; 20% disc. All other charges by meter. Meter up to 15M cu. ft. per qr. 15c. per 100 cu. ft. Sliding scale to 100,000 cu. ft. 5c. per 100. 20% discount.	*	*	*	*	House flat rate 3 room \$5; each additional room 75c.; w. c. \$3.50; bath \$4; 30% disc. All other charges by meter. Meter up to 15M cu. ft. per qr. 15c. per 100. Sliding scale to 100 M cu. ft. 5c. per 100. Meter rent net. 30% discount.	*	*

THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913
<i>Ontario—Continued.</i>						
Hamilton.....	*	*	*	*	*	*
Kenora.....	*	*	*	*	*	*
Kingston.....	10% reduction	*	*	*	*	*
London.....	*	*	*	*	*	*
						House flat rate 3 rooms \$5, each additional room 75c, w.c. \$3.50, bath \$4, 40% discount. All other charges by meter. Meter up to 15 M cu. ft. per qr. 15c. per 100 cu. ft. Sliding scale 100 M. cu. ft. 5c per 100 (Meter rent net) 40% discount.

\*Same as preceding year.



## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Niagara Falls.....	Flat rate, house full fixtures including bath, w.c., basin, lawn-tap \$11 per annum additional rates for public bath, etc. Meter rate hotels etc. 1M-6M daily 12c. to 6c. per M. Mfg. 6c per M, \$6 meter rent.	*	*	*	*	*	*	*
Oshawa.....		*	*	*	*	Flat rate \$1.50 single tap or meter rate 10c per 100 cu. ft. for 1st 2,000 ft. and 5c above with \$1.25 meter rent.	*	*
Owen Sound.....	Kitchen tap only \$3; whole service \$6.	*	*	*	k. tap \$2..... w.s. \$5..... Minimum \$6, \$1 for each ad- ditional room, w.c. \$3, bath \$2 basin \$1, 20% disct.	*	*	*
Pembroke.....								
Peterborough.....	House minimum 4 persons or 5 rooms and under, \$6; bath \$2, w.c. \$3, basin \$1, lawn sprinkling \$3 and up. Commercial rate by meter-5% disct.	*	House, min. 4 persons or 5 rooms and under \$6 etc., bath \$2, w.c. \$3 basin \$1, lawn sprink- ling \$3 up. Meter rate in- creased to 35c. per M gal. Dis- count 10%.	*	House mini- mum 4 rooms 1 tap \$4, for each addition- al room or tap 50c. bath \$2, w.c. \$3; basin \$1 lawn \$2.50 up. Meter 1M cu. ft. per month 25c. and meter rent. Disct. 25%.	*	*	Dis. 33½ per cent.

THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Ontario—Continued.</i>							
Niagara Falls.....		*	*	*	*	*	*
Oshawa.....		*	*	*	*	*	*
Owen Sound.....		Kitchen tap only \$3 whole service \$6. *	*	*	*	*	*
Pembroke.....	*		*	*	*	*	
Peterborough.....	*	*	*	*	*	*	

\*Same as preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
<i>**Ottawa.....</i>	Flat rate on house and lot value to \$300, \$6, \$300 to \$600, \$8, \$600 to \$1,000, \$10. Every \$500 additional, \$2. Extras for institutions, commercial, etc., stables, horses, cows, etc. Meter rate, 10c per M gallons. Rent, $\frac{1}{4}$ in \$3, $\frac{1}{2}$ in \$3.75 and up. Discount 25%.	*	*	*	*	*	*	*
Port Arthur.....								1st M gals 10c. above 1M 7c.
Port Hope.....	Meter 25c. per M gal., minimum \$9 per annum.	*	*	*	*	*	*	*
St. Catharines.....	House-opening rate, sliding scale, 4 rooms \$3.50 to 8 rooms \$6.00 service rate, bath \$2, basin \$1, w. c. \$2 etc. Meter rates 12c. to 5c. per 100 gal. Disc. 10%.	*	*	*	*	*	*	*
St. Thomas.....	House of 6 rooms, bath and w. c. \$6.40 per yr.	*	*	*	*	*	*	*
Sarnia.....	House minimum 4 rooms, 3 inmates \$3, each additional person or room 25c., bath \$2, w. c. \$2.	*	*	*	*	*	*	*
Sault Ste Marie.....	House flat rate 1 room \$5, sliding scale to 10 rooms \$10.50, w. c. \$2, bath \$2, lawn \$2, meter rate 15c. for 1st 100 cu.ft., over that 5c. with minimum rate per size of service. Commercial rates.	*	*	*	*	*	*	*
Toronto.....	House 4 rooms 2 persons \$1.50 minimum, rising 25c. for each additional room or inmate. Bath \$1.25, basin 50c., w. c. \$1.25, lawn 62½c. up. 20% discount. Flat meter commercial and manufacturing rates.	*	*	*	*	*	*	*

THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Ontario.</i>							
**Ottawa.....	*	Flat rate sliding scale, \$300 and under \$3, \$300 to \$600 \$4 \$600 to \$800 \$5 \$800 to \$1,000 \$6, each additional \$500, \$1. Extras for institutions, commercial, etc., stables and animals, Meter rate, sliding scale, 8c. to 6c. per M. gallons. Meter rent, $\frac{1}{2}$ in \$1.50, $\frac{1}{4}$ \$2, Disc. 15% on $\frac{1}{2}$ yearly a/cs in advance.	*	*	Same general arrangement as in 1910 with 20% advance.		*
Port Arthur.....	*						Installed 1906.
Port Hope.....	*				*	*	
St. Catharines.....	*			*	*	*	
St. Thomas.....	*			*	*	*	
Sarnia.....	*			*	*	*	
Sault Ste Marie.....	*			*	*	*	
Toronto.....	*	House, minimum \$2 per annum for 4 rooms rising 50c. for each additional room. Basin \$1, bath \$1.25, w.c. \$1.50, lawn 62 $\frac{1}{2}$ c. up, 10% discount. Commercial and mfg. rates special.	*	*	*	*	

\*Same as preceding year.

\*\*Not included in Index number.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Woodstock.....	1st tap \$5, each additional \$1, bath \$2, w.c. \$2.50, lawn \$4 up also meter and commercial flat rates. Disc. 20%.	*	*	*	*	*	*	*
Welland.....	Tap \$5, w.c. \$2, bath \$1, lawn \$2.....	*	*	*	*	*	*	*
<i>Manitoba.</i>								
Brandon.....	Sliding scale, 1st 100 to 500 gal. per day 33c. per 1,000 gal..	*	*	*	*	*	*	Sliding scale 100-500 gal. daily, 50c. per M mfg. rates 12½c. per M. Ry. Corporation 12½-6½ M. \$15 per annum.
Portage la Prairie.							Meter system 50c. per M gal. min. \$2 pr qr.	*
St. Boniface.....						House on room basis without extras, sliding scale 1 room 45c. per qr. to 16 rooms \$7.20 with extras 59c. to \$9.44, also meter rate.		
<i>Winnipeg.....</i>	House flat rate 4 rooms \$3.37 per qr. also commercial meter rates per classified scale and building service rates.	*	*	House flat rate 4 rooms \$2.50 per qr. \$1.30 per qr. also commercial meter rates 30c. per class-M according to scale of building service rates. Disc. 16½ to 30%.	House flat rate 4 rooms \$1.30 per qr. \$1.30 per qr. also commercial meter rates 30c. per class-M according to scale of building service rates. Disc. 16½ to 30%.	House flat rate 4 rooms \$2.50 per qr. \$1.30 per qr. also commercial meter rates 30c. per class-M according to scale of building service rates. Disc. 16½ to 30%.	House flat rate 4 rooms \$2.50 per qr. \$1.30 per qr. also commercial meter rates 30c. per class-M according to scale of building service rates. Disc. 16½ to 30%.	House flat rate 4 rooms \$2.50 per qr. \$1.30 per qr. also commercial meter rates 30c. per class-M according to scale of building service rates. Disc. 16½ to 30%.



THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
Woodstock.....	.....	*	*	*	*	*	*
Welland.....	.....	*	*	*	*	*	*
Manitoba.							
Brandon.....	*	*	*	*	*	*	
Portage la Prairie.....	*	50c. per M gal. with min. charge \$1.50 per qr. Special rates mfg. etc. 25c. per M.	*	*	*	\$19 per annum. * Installed 1907.	
St. Boniface.....	*	House flat rate 4 rooms \$1.50 per qr., also commer- cial 20c. per M. Discount 5c.-20%.	*	House flat rate 4 rooms \$1.50 per qr., also commer- cial 20c. per M. Discount 15-30%.	*	House flat rate 4 rooms \$1.75 per qr., also commer- cial 23c. per M. Discount 5-20%.	
Winnipeg.....	*		*		*		

\*Same as preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
<i>Saskatchewan.</i>								
Moosejaw.....	Meter rate sliding scale 5,000 and under to over \$100,000 cu. ft. 25c.—10c. per 100 cu. ft. per qr. and meter rentals—\$6-\$30 per annum.	*	*	*	*	*	*	*
Regina.....						House 4 rooms and under \$12, with bath and w.c. \$22, each additional room \$1; lawn \$4 up, mfg. meter rate 12½c M. gals.	*	*
Saskatoon.....							House 5 rooms and under with 1 hot and 1 cold water tap \$8, each additional tap or room \$1; bath \$3, basin \$3, w.c. \$4, lawn \$6 up, also meter rates.	*
Prince Albert.....							6 room house with bath, basin and w.c. \$20 per annum.	*

\*Same as preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908.	1909.	1910.	1911.	1912.	1913.
Moosejaw. Regina. Saskatchewan.	*	*	*	*	*	*
	*	House 4 rooms and under \$12, with bath and w.c. \$22, lawn \$4, each additional room \$1, meter minimum 150 gals. a day, under 5M, 35c. per M, 3M 25c. per M sliding scale to 75M at 12½c. and meter rent.	House 4 rooms and under \$12, with bath and w.c. \$22, lawn \$4, each additional room \$1, meter minimum 150 gals. a day, under 5M, 35c. per M, 3M 25c. per M sliding scale to 75M at 12½c. and meter rent.			House flat rate 4 rooms and under, 1 hot water tap, 1 cold water tap \$9 including bath, w.c. and each additional room 75c., lawn \$3 up. Commercial rate meter 25c.—6c. and rent. Min. annual rate \$8 for 666 cu. ft. per qr., cu. ft. per qr. over that amt. following rates up to 2M ft. up to 2M ft. 25c., up to 12M qtrly 30c., per ft. 20c., up to 100 ft., up to 75M ft. 15c., over 75M 10c. 100 ft.
Saskatoon.	*	Fixed annual meter rate for 8" meter to 4" \$6—40, and water rate up to 2,000 cu. ft. per qr. 30c. per 100, each additional 100 cu. ft. up to 20M quarterly 15c. per 100 cu. ft. over this 10c.			Each additional 100 ft. qtrly 10c. per 100 ft. Fixed water rent ¼ or ⅝"—4" \$2—\$30.	
Prince Albert.	*	*	6 room house with bath, basin and w.c. \$15 per annum.	*		*

\* Same as preceding year.

## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.
<i>Alberta.</i>								
Calgary.....								
Edmonton.....				House 6 rooms and under, 1 hot, 1 cold tap \$8 per annum, each additio- nal room \$1, and bath \$4, w.c. \$4, lawn \$4 up, commer- cial flat and meter rates and rents. 10 p.c. discount.	*	*	*	*
Medicine Hat.....	5 room modern house \$12 per annum....	*	*		*	*	*	*
Lethbridge.....								

\*Same as preceding year.

THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Alberta.</i>							
Calgary.....	House min. 4 rooms \$4.50 basin \$1, w.c. \$1, bath \$1, lawn \$1, up. also commercial flat and meter rates.*	*	House min. 5 rooms \$5, bath w.c., basin, tap or sink and lawn per 25 ft. lot \$1 each, also commercial rates.*	*	*	*	*
Edmonton.....	*	*	*	*	*	*	In a number of cases separate charge for window washing and street sprinkling in addition to lawn and garden watering.*
Medicine Hat.....	*	5 room modern house \$18 per annum.*	*	*	*	*	Installed 1908 also. Steam-heating 8 mos. \$6. Hot water heating season \$3. Discount 10%.
Lethbridge.....	House meter only, 1st tap \$20 per annum. each additional \$3, bath \$3, w.c. \$2, sink, \$1 lawn \$4 up. Dis. 10%, flat and meter rate also for commercial.		*	House meter only, 1st tap \$12 per annum, each additional 50c., bath \$3, w.c. \$2, sink \$1, lawn \$4 up. Dis. 10%, flat and meter rate also for commercial.	*	*	

\*Same as preceding year.



## THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>British Columbia.</i>								
New Westminster...	House 80c. \$1.30 net, according to service; flat rate: meter, mfrs., etc., 6-4-8 per 100 cu. ft.	*	*	*	*	*	*	*
North Vancouver...								House with-out sanitary fixtures \$9, with full plumbing \$12, dis. 20%.
<i>Prince Rupert.</i>								
South Vancouver...	House (1 family) \$9. bath \$4, w.c. \$4, lawn \$3 up, 20% disc.; other flat and meter rates for hotels, stores, mfg., etc. Meter rate 500 c. ft. 30c. scale up and meter rent 25 and up, 5% disc.	*	June house (1 family) \$6, bath \$3; w.c. \$4, lawn \$3 up, 20% disc. Other flat and meter rates for hotels, stores, mfg., etc. Meter rate 500 c.ft. 30c. scale up and meter rent 25c. up, 5% disc.	*	*	House (1 family) \$6; bath \$3, w.c. \$4, lawn \$3 up, 20% disc. Meter rates 500 c.ft. 16c. scale up and disc. 20%.	*	*
Vancouver...								
Victoria ....	1st 5,000 gals. 20c. per M gal. over that 10c., min. \$1.25 exclusive of meter rent \$1.50.	*		1st 5 M gal. 20c. pr. M gal. over that 10c. Min. \$1.25, exclusive of meter rent \$1.50, house of 4 rooms min. 70c.; 5 rooms 85c. per mo.; no meter rent.	*	Up to 1,000 gal. 50c. over 1,000 10c. Min. 50c. per mo. No meter rent; 10% disc.	*	*

\*Same as preceding year.

THE PRICE OF WATER SERVICE, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>British Columbia.</i>							
New Westminster.....	*	*	*	*	*	*	Installed 1907.
North Vancouver.....	*	*	*	*	*	*	
Prince Rupert.....							
South Vancouver.....	*	House flat rate (1 family) \$10 per annum, bath \$3.60, w. c. \$4.20; com- mercial rates and meter rates 500-5,000 c.ft. 20c. per 100 ft. up to 20 M 18c. per 100 ft. me- ter rent 25c. \$1.50 mo., 20% discount.	*	*	House 4 rms. 1 tap \$6, each additional tap or room \$1, bath \$3, w.c. \$3; also flat commercial and meter rates.	House 1 tap \$8, bath \$3, w.c. \$3, lawn \$2 up; public and commercial rates, also meter 500- 5,000 lbc. per 100, over 10 M 5c. flat rate; dis. 20% meter net.	
Vancouver.....	*		*	*	House (1 fam- ily) \$6, bath \$3 ily) \$6, bath \$3 w.c. \$4, lawn w.c. \$4, lawn \$2.50 up, 20% disc.; meter rates 500 c.ft. 16c. scale up; reduction in scale to large consumers. Disc. 20%.	House (1 fam- ily) \$6, bath \$3 w.c. \$4, lawn w.c. \$4, lawn \$2.50 up, 30% disc.; meter rates 500 c.ft. 16c. scale up; reduction in scale to large consumers. Disc. 30%.	
Victoria.....	*	Flat rate 4 rooms 75c. net; 5 rooms 90c., etc.; meter rate 2,000 gal. \$1; over 12½c. and meter rent 25c. up; 10% disc; other rates for shops, etc.	*	*			

\*Same as preceding year.

## ELECTRIC LIGHTING, 1900-1913.

The price of electric lighting over the period 1900-1913 in 68 localities will be found in the large table herewith. As in the case of water rates, some difficulties in compilation were imposed by the difference in the methods of levying charges which prevail, these including flat rates, meter rates, rates based on the number and power of lamps used, rates based on house valuation, rates reflecting cost of installation, etc., with varying sliding scales and discounts. It is thought, however, that the table will show the general tendency of costs with a fair degree of accuracy.

On the whole, the price of electric current has been markedly downward since 1900. From the subjoined table of index numbers it will be seen that the average decline has amounted to about 30 per cent; this would be considerably increased by weighting the localities according to population, as it is in the large centres that the most pronounced decreases have taken place. Of 60 complete records, 38 show reductions, 22 remained stationary, and only one showed an increase. Most of the reductions range from 25 to 50 per cent, but instances of 60 and 80 per cent occur.

It may be noted that the Maritime Provinces have been affected least by the downward trend. In Quebec also the situation has tended to stability in the smaller localities; Montreal and adjacent cities, however, are down by one-half. Of Ontario the opposite may be said; the exceptional localities are those in which reductions have not been made. This is largely attributed to the advent of Niagara power under the administration of the Hydro Electric Commission, which by direct competition lowered rates in many localities, and in others indirectly effected the same result. In Manitoba the index number shown is the lowest of any province; this reflects a reduction in Winnipeg and St. Boniface from an 18 cent rate in 1900 to a 10 cent rate in 1906, and finally to a 3½ cent rate with a discount in 1912 following the installation of the Municipal Hydro Electric plant. In the other western provinces material reductions are shown in several cases as a result of municipalization.

Generally speaking, the reduction in electric light charges has accompanied the growth of public ownership. Another agency working for lower prices has been the adoption of metering, which in certain localities was reported to have effected savings amounting to 33½ to 50 per cent. The Public Utilities Commission of Nova Scotia and the Hydro Electric Commission of Ontario, it may be pointed out, favour a sliding scale according to the amount used, with base rate on floor area. These bodies have also exerted their influence for the simplification of schedules, (with implied reduction of accounting costs) the promotion of uniformity in order to facilitate comparison of rates, and the securing of publicity through better statistical records. It should be added that in several cases where rates have remained unchanged, betterments through new and improved appliances have affected appreciable reductions in cost to the consumer. Taking all things into consideration the price of electric lighting to the consumer in Canada may be said to be down by nearly one-half since 1900.

ELECTRIC LIGHT 1900-1913—INDEX NUMBERS.

Province.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Nova Scotia.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
New Brunswick.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Quebec.....	100.0	100.0	100.0	100.0	100.0	100.0	97.3	96.5	95.8	95.4	84.2	83.5	78.8	77.5
Ontario.....	100.0	98.8	96.8	97.0	96.2	93.9	92.4	92.4	90.8	89.3	85.3	80.5	78.6	68.6
Manitoba.....	100.0	100.0	100.0	100.0	100.0	100.0	66.6	66.6	51.0	51.0	51.0	39.7	27.5	27.5
Saskatchewan.....	100.0	100.0	100.0	100.0	100.0	100.0	96.6	98.3	98.3	84.0	63.2	63.2	51.4	51.4
Alberta.....	100.0	100.0	100.0	100.0	100.0	100.0	71.4	71.4	85.7	70.8	60.1	56.5	53.0	43.7
British Columbia.....	100.0	80.8	80.8	80.8	80.8	75.0	75.0	81.7	81.7	81.7	81.7	81.7	78.6	65.5
Canada.....	100.0	98.5	97.4	97.5	97.2	95.9	93.9	92.1	90.5	88.6	83.5	80.2	77.1	70.7

## ELECTRIC LIGHT AND POWER PER K. W. HOUR, 1900-1913.

Locality.	1900	1901	1902	1903	1904	1905	1905	1907
<i>Nova Scotia.</i>								
Amherst.....	House: up to 50 K. W. 13c. over 50 11c., hotels, etc., 1st 100 K. W. 13c., over 12c.-11c., also flat rate and meter rent; 10% discount.	*	*	*	*	*	*	*
Dartmouth.....	12½c. house commercial.....	*	*	House up to 5-16 c.p. light 33c. each per month sliding scale to 16-25c. also commercial 40c. per 16 c.p. a month, and hotel rates.	*	*	*	*
Gloucester.....								
New Glasgow.....	15c., 10% discount.							
North Sydney.....	12c.	*	*	*	*	*	*	*
Springfield.....	12c.	*	*	*	*	*	*	*
Sydney.....								
Sydney Mines.....								
Truro.....								
Yarmouth.....								
<i>New Brunswick.</i>								
Fredericton.....								

Light sliding scale (min. \$1 a mo.) net 12-9c. meter rent 25c. per mo. Power 2.7 to 9c. net for 2 h. p. and up, meter rent 25c. minimum \$2. Heating and other rates.

10c. for each socket wired (over 10, 3c.) and current 10c. per K. W. less 10%.

House 12c. net. Mercantile 12-16.



## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Nova Scotia.</i>							
Amherst.....	*	*	*	*	*	*	Increased efficiency of lamps due to metal filament and has reduced cost of c.p. to consumer over 50% within 14 yrs.
Dartmouth.....	*	*	*	*	*	*	
Glace Bay.....	*	*	*	*	*	*	
New Glasgow.....	*	*	*	*	*	*	
North Sydney.....	*	*	*	*	*	*	
Springfield.....	*	*	*	*	*	*	
Sydney.....	*	*	*	*	*	*	
Sydney Mines.....	*	*	*	*	*	*	
Truro.....	*	16c. per K. W. sliding scale, disc. up to \$2, 12½%, to \$20, 50%.	*	*	*	*	Light sliding scale, 1st 15 K. W. 15c., over 150, 8c., less 10% disc. Power 1st 50 K.W. 12c. over 500 K.W., 7c., less 10% disc. monthly min. in light \$1.11, power 83c. per K.W.
Yarmouth.....					15c. dis. 10%.		
<i>New Brunswick.</i>							
Fredericton.....	*	*	*	*	*	*	

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907	Remarks.
<i>Quebec.</i>									
Chicoutimi.....	Sliding scale, house 1-30 lamps \$6-\$62; shops etc. 1-3 L. \$7-\$12 each additional \$3—disc. 20%. Flat rate, sliding scale \$5, \$1.50 for 1 to over 80 lamps 16 c.p., meter rent 10c.—2c. for 50 to over 2,500 K.W.H. per mo. Flat rate, 40c. per 16 c.p. lamp.	*	*	*	*	*	*	*	
Joliette.....		*	*	*	*	*	*	*	*
Lachine.....		*	*	*	*	*	*	*	
Levis.....									
Maisonneuve.....									
Montreal.....	15c. 15% discount on 5 yr. contracts. 5% disc. on 1 yr. contracts. 15c. less 20% discount.	*	*	*	*	*	*	*	
St. Hyacinthe.....		*	*	*	*	*	*	*	
Sherbrooke.....		*	*	*	*	*	*	*	
Sorel.....		*	*	*	*	*	*	*	
Three Rivers.....	House, 1st lamp 16 c.p. \$5 per an. 2nd lamp \$4.50 per annum, shops 1st lamp \$7 per annum, also meter rate. 13c.—25c. per m. meter rent \$13.75.....	*	*	*	*	*	*	*	On 5 yr. contract.
Valleyfield.....		*	*	*	*	*	*	*	
Westmount.....		*	*	*	*	*	*	9	

ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913
<i>Quebec.</i>						
Chicouimi.....	*	*	*	*	*	Sliding scale, house 1-30 lamps \$6-\$62; Shops etc. 1-3 lamps \$7-\$12 each addition- nal \$3, disc. 10%. * *
Joliette.....	*	*	*	*	*	
Lachine.....	*	*	10c. per K.W. H. disc. 20%.	*	*	10c. per H.W. H., disc. 30%. 20c. less 40% discount.
Levis.....						
Maisonneuve.....						
Montreal.....	*	*	10c. 20% disc. on 5 yr. contracts. 5% disc. on 1 yr. contracts.	*	*	8c. 20% disc. 5 yr. contracts 5% disc. on 1 yr. contracts.
St. Hyacinthe.....	*	*	*	*	*	*
Sherbrooke.....	*	*	6c.	*	*	*
Sorel.....	*	*	*	*	*	*
Three Rivers.....	*	*	*	*	*	*
Valleyfield.....	*	*	*	*	*	*
Westmount.....	8	7½	7	6	7c. plus 13c. per mo. for meter rent. 6	6

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913--Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario.</i>								
Barrie.....	10c. net.	*	*	*	*	*	*	*
Berlin.....	House, 15c., meter, 25c. Commercial, 15c., meter 25c. Power 12c. (no meter rent).	*	*	*	House and House & Com- mercial same. Power 8c., meter 50c.	mercial 7-8c. meter 25, Power 8c. Meter 50c.	*	*
Brockville.....	20c. net.	20	10	*			*	*
Brantford.....					10c. per K.W. 10% disc.	*	*	*
Chatham.....								
Cobalt.....								
Cobourg.....	15c.	*	*	*		*	*	15c. *

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Ontario.	1908	1909	1910	1911	1912	1913	Remarks.
Barrie.....	*	12½c. less 20-10% discount.	*	*	*	House, 4c per 100 sq. ft. floor space per month. Min. 25c., service charge 4½c. per K.W. by meter, less 10% disc. also commercial.	1913 Hydro-Electric.
Berlin.....	*	*	(1) house per 100 sq. ft. area, light 5c. per mo., min. 75c. and 4c. service charge per K.W. (2) commercial 12c. K.W.H. for 1st hour daily and 5c. above 1st hr. (3) flat rate \$6 per mo. per K.W. min. 167 K.W. s; \$1 monthly charge 20% disc.	*	*	(1) house 4c. per 100 sq. ft. 4c. service charge also a house measurement charge. (2) commercial 8c. and 4c. disc. 20%. (3) flat rate \$6; 10% disc.	
Brockville.....	*	*	*	*	*	*	Hydro-Elec. also in 13 rate 3c. per K.W. with a fixed floor space rate at 4c. per 100 sq. ft.
Brantford.....	*	*	*	*	*	*	
Chatham.....	*	*	10c.	*	*	*	
Cobalt.....	*	*	*	*	*	*	
Cobourg.....	8	*	*	*	*	*	

\*Same as preceding year.



## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Collingwood.....			Meter rate, min. charge per mo. 75c., 12c. per k. w. Rent of 10c. for 10 light meter and up. Commercial rates with 5-30% discount. 20% discount extra for prompt payment.	*	*	*	*	*
Cornwall.....	16 c.p. lamp \$6 per annum. 10 p.c. lamp \$4.20 per an., no discount.	*	*	*	*	*	16 c.p. l. \$6 per an. 10 c.p. \$4.20 per an. 20% disc. *	*
Ft. William.....	Residential-flat rate 30c. per mo. for 16 c.p. lamps less 10% disc. Commercial 50c. per mo. 16 c.p. lamp, 10% disc.	*	*	*	*	*	*	*
Galt.....			4c. per 100 sq. ft. base rate; 4c. k.w. less 25%.	*	*	*	*	*
Guelph.....				20c. per K.W. Meter rent 50c	*	*	15c. per K.W. Meter rent 25c	*
Hamilton.....	House 20c. less 50% disc. Commercial 20c. less 20% disc.	*	*	*	*	*	*	*
Kenora.....	Sliding scale, domestic 1-10 lamps 16 c.p. 50c. to \$4.20. Com'l 1-5, 16 c.p. lamps 90c-\$3.20; also rates for larger number of lamps. Rate for 8 c.p. in residence 1-10, 25c.-\$2.15.	*	*	*	*	*	*	*
Kingston.....	12c.	*	*	*	*	*	10 *	*
London.....	Light 18c.; less 50% discount and 25c. per mo. meter rent.	*	*	*	*	*	*	*

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Ontario.</i>							
Collingwood.....	*	*	*	*	*	Hydro-Elec. Civic plant to 4c. per mo. per 12 Hydro-100 sq. ft. and Elec. installed 4½c. per K.W. in 1913. H. 10% disc.	
Cornwall.....	*	*	*	*	*	Flat rate 16c. Light under meter system num. 10c. costs about \$4.20 per an-half what it num. Meter did under flat rate. 10c. per K.W. rate.	
Ft. William.....	*	*	Meter install- ed 7c. per K- W.H. for both domestic and business, 10% discount.....	*	5c. domestic, 7c., business.	Discount 30%. 5c. domestic, 5c. business, disc. 10 to 35%.	Public was ad- verse to meter installation in 1909, now city cannot keep up with demand.
Galt.....	*	*	15c. disc. 5%.	*	*	*	
Guelph.....	*	*	10c. disc. 10%	10c. disc. 10%	10c. disc. 20%.	4c. per 100 sq. ft. of floor rates charged previous to '03 space and 4c. per K.W. con- sumption charge disc. 20%.	No record of rates charged previous to '03 Hydro-Elec. '13.
Hamilton.....	*	House 8½c. less 10% discount. Commercial 4½c. less 10%.	*	*	*	House 8½c. less 10%.	Consumers buy their own lamps.
Kenora.....	*	*	*	*	*	1½c. less 20%.	
Kingston.....	*	*	Light, heat &c. 5c. less 10% discount.	*	*	*	
London.....	*	*	Power, special rates.	*	*	*	

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Niagara Falls.....	7c. net.....	*	*	*	5c.	*	*	4½c.
Oshawa.....	10c. net.....	*	*	*	*	*	*	*
Ottawa.....						12c. less 40% discount and \$1 meter rent.	*	*
Owen Sound.....	10c. net.....	*	*	*	*		*	*
Pembroke.....					Sliding scale 12c. for M-25 M Watt down to 7c. for over 200M Watts.		*	*
Peterborough.....	10c. net.....	7½	*	*			*	*
Portage la Prairie.....	House Flat rate per mo. 1-20 lamps 16 c.p. 55c.—\$5.40, 10% discount	*	*	*		7	*	*
Port Arthur.....	Commercial 1-20 lamps 75c.—\$8.45, 15% disc., also meter rates 8c. per K.W. House 4c. per 100 sq. ft. area and 3½c. per K.W., 10% disc.	*	*	*		*	*	*
Port Hope.....	House, \$3 per annum each 16 c.p. lamp, commercial \$5..	*	*	*	*	*	*	*

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Ontario—Continued.</i>							
Niagara Falls.....	*	4	*	8c. per K.W., net or 10c. per room per mo., plus 3c. per K.W.H.	H	*	
Oshawa.....	*	*	*	8c. less 10% discount or floor area charge 4c. per 100 sq. ft. a mo. and 3c. per K.W.H.	3½c.	*	
Ottawa.....	8c. less 10% discount and \$1 meter rent.	*	*	10% discount.	*	*	Municipal Elec. Plant.
Owen Sound.....	.....	8c.	*	*	6 4-10	*	
Pembroke.....	*	*	7c. or 10c. per living room & 3c. per K.W.H.	*	*	*	
Peterborough.....	*	*	*	15c.	*	*	Jan. '14 house consumption charge 2½c. per K. and 10% discount.
Portage la Prairie.....	*	*	*	*	*	*	Jan. '14 commercial, 6c. for 1st 30 hrs. installed capacity.
Port Arthur.....	*	*	*	*	*	*	
Port Hope.....	*	*	*	*	*	Residential 5c. per K.W. less discount of 40% plus 10c. per living room per mo. Commercial 10c. per K.W. less 20% disc.	

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
St. Catharines. ....	7c. per K.W. 25c. per mo. meter rent, less 10% disc.	*	*	*	*	*	*	*
St. Thomas. ....	House 10c. ....	*	*	*	*	10c. to 12c	**	*
Sarnia. ....	Sliding scale 12c.-9c. ....	*	*	*	*	10c. to 7c.	*	*
Sault Ste. Marie. ....	1c. per Watt per month (house) for 1st 150 Watts of rated installation; then 4c. installation to 1,000 Watts; 10c. per K.W. for 1st 30 K.W. per mo. and scale to 5c. and 2c. for larger con- sumption; also meter rates with dis- count.	*	*	*	*	■	*	*
Toronto. ....	House: 20c. less 60% disc. and meter rent 25c. per mo. and 25c. for each lamp installed. Commercial and other rates.	*	*	*	*	■	*	*
Welland. ....	8c.-6c. net. ....	*	*	*	*	*	*	■
Woodstock. ....	8c. net and 60c. per quarter meter rent..	*	■	*	*	*	*	*



## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Ontario.	1908	1909	1910	1911	1912	1913	Remarks.
St. Catharines.....	*	*	*	* 5c. to 12c.	* 4c. to 9c.	* 3c. to 6c.	Previous to 1905 controlled by Private Company.
St. Thomas.....	*	*	*	*	10-5½*	*	**Rate quoted under 1913 is 4c. per 100 sq. ft. floor area Elec. plant. and 3c. per K.W. Previous rates W. and 10 per Tor. Elec. Co. rent discount Both in use since 1911. Also com-mercial rate. General Mgr. Hydro-Elec. system says rate worked out at approx. 4.5c. per K.W. hour for residence service. Hydro-Elec. in 1913.
Sarnia.....	*	*	*	8c. per K.W. H. as follows: 6 roomed house 1st 10 K.W. per mo. 7 and 8 roomed house 1st 15 K.W. up to 18 roomed house 50 K.W. 10% disc., no meter rent or installation charge. Also Hydro-Elec. rates, See **.			
Sault Ste. Marie .....	*	*	*				
Toronto.....	*	*	*				
Welland .....	*	*	*	*	*	3c. less 25%....	On area basis house 16 x 20, 2 floors would pay about 20c. per month service charge.
Woodstock.....	*	*	*	3c. per 100 sq. ft. floor area and 3c. per K.W. H. net.			

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality:	1900	1901	1902	1903	1904	1905	1906	1907
<i>Manitoba.</i>								
Brandon...	20c., disc. 10-33 $\frac{1}{3}$ %.....	*	*	*	*	*	*	*
St. Boniface.....	20c., disc. 10 to 15%.....	*	*	*	*	*	10c. dis. 10-15%. 10c. disc. 10-	*
Winnipeg.....	20c., disc. 10 to 15%.....	*	*	*	*	*	10c. disc. 10-	*

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Manitoba.</i>							
Brandon.....	10c. 5% disc...	*	*	*	*	*	Hydro-Elec. Municipal plant installed Oct. '11. From Oct. '11. From less 20% discount. 1912-34c. less 10% discount for houses and 20% commercial.
St. Boniface.....	*	*	*	Oct.-Dec. 74c. 34c. Disc. 10-35%.	Oct.-Dec. 74c. 34c. Disc. 10-35%.	*	Hydro-Elec. Municipal plant installed Oct. '11. From Oct. '11. From less 20% discount. 1912-34c. less 10% discount for houses and 20% commercial.
Winnipeg.....	*	*	*	Oct.-Dec. 74c. 34c. Disc. 10-35%.	Oct.-Dec. 74c. 34c. Disc. 10-35%.	*	Hydro-Elec. Municipal plant installed Oct. '11. From Oct. '11. From less 20% discount. 1912-34c. less 10% discount for houses and 20% commercial.

\*Same as preceding year.

## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Saskatchewan.</i>								
Moosejaw.....					Light 15c. net, power 8c. Disc. 5-40%	* 1-4 lights 16 c.p. 75c. per mo. per lamp, 4 lights and up, meter rate 14c. per K.W., meter rent 25c. per mo. mini- mum charge \$1.	Light 14c. net, power 8c. Disc. 5-40%.	*
Regina.....								*
<i>Saskatoon.</i>								
								Light, 1st 100 K.W. H. 15c., 2nd 100 12c., over 200 10c., power 14c.
<i>Alberta.</i>								
Edmonton.....	21c. and sliding scale, 14, 16, 18c. for over 1,000 K.W. lighting.	*	*	*	*	*	14-16 per K.W. light, 12 per K.W. power.	*
Lethbridge.....								
Medicine Hat.....								

ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Saskatchewan.</i>							
Moosejaw.....	*	Light 12c., disc. 10%; power 7c., disc. 5-40%.	Light 12c., disc. 10%; power 6c., disc. 5-40%.	*	Light 8c., disc. 10%; power, 11-5c., according to size of install- ation and amount con- sumed. Heat- ing and cook- ing 5c.; disc. 10%.	*	Plant installed 1904.
Regina.....	*	*	*	*	Light, 1st 300 K.W. H. 7c. per K., over this 6c. per K.W. and meter rent. Power, 1st 300 K.W. 5c. per K., to 600 K. 4c., over 600 K.W. 3½c. 1st 100 K.W. 9c., 2nd 100 3c., over 200 7c.; over 100 h.p. capacity 1c.; power 6.	*	
Saskatoon.....	*	1st 100 K.W. 1st 100 K.W. 14c., 2nd 100 11c., 2nd 100 12c., over 200 9c., over 200 10c.; power 12, 8c.; power 9.	*	*		Base charge for stoves 4c., over 100 h.p. cap. 3c. and special rates 3½c. lighting; power, mini- mum 3½c., maximum 7c. 8c. less p.c. disc.	
Edmonton.....	*	3½c. lighting, 4, 6, 8c. power.	*	*	*		
Lethbridge.....	14c.	*	11c.	10c.	9c.		Municipal plant installed 1908.
Medicine Hat.....					House 8c., commercial 6c.	*	Installed 1912.

\*Same as preceding year.



## ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>British Columbia.</i>								
New Westminster...	House flat rate \$1-\$1.50 net. No meter.	*	*	*	10-4c.-8-0c. Meter 25c.	*	*	*
North Vancouver...								1st 40 K.W. H. 17c. pr K. next 60 K. W. H. 12c., next 100 K.W. H. 10c. Disc. 5%.
Prince Rupert...								
South Vancouver...								
Vancouver...	Monthly consumption basis 20c. meter rent 25c. Disc. bills up to \$10, 20% and disc. bills up to \$25-40%.	Per Month— 1st 40 K. W. 16-15c.; per K. next 60 11-4 excess of 100 9-5 meter rent 25c. per 1 m. Disc. 5%.	*	*	*	Monthly June 1st 40 K., 12c. next per K. 1904 next 60 10c. net per K. over 100 3c. net per K. 300 K. 8c. net per K. meter rent 15c. Disc. 1c. per K.W.	*	1st 50 K.W. 10c. net per K. next 50 K. 9c. net per K. next 300 K. 8c. net per K. meter rent 15c. Disc. 1c. per K.W.
Victoria...	Light—1st 40 K.W. 13c. per K. next 60 K.W. 11c. per K. Disc. 1c. per KW. Power — 1st 100 7c., scale down to 2c. K.W.	*	*	*	*	K.W.H. *	*	*

ELECTRIC LIGHT AND POWER PER K.W. HOUR, 1900-1913—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>British Columbia.</i>							
New Westminster.....	*	8-8-7-2 meter rent 15c.	*	*	8-8-7-2 meter rent abolished *	*	
North Vancouver.....	*	1st 50 K.W.H. 15c per K. W. 2nd 50 K.W.H. 14c. per K.W. next 300, 13c., next 300, 12c. Discount 20%.	*	*		st 50 K.W.H. 11c. per K. 2nd 50 K.W.H. 10c. per K. next 300, 9c., next 300, 8c., Discount 20%.	
Prince Rupert.....			18c. less Disc.	25%	Min. charge \$1 per m. up to 49 K.W.H. 18 c., sliding scale up to 999 K.W.H. 15c. Dis. 25%. Coml. rates also.	*	
South Vancouver.....		15c. 1st 50 K.W. 8-8 net K., next 50 K.W. 8' net K. next 300 K.W. 7-2 net K. me- ter rent 15c. Dis. 20%.	*	*		11c.	Installed 1909 1st outfit of carbon lamps given free, also free renewals burnt out lamps. De- crease since 1900 stated to be about 50% on ordinary light accs.
Victoria.....	*	*	*	*	1st 50 K.W. 11c. per K., next 50 K.W. 10c. per K. Disc. 20%.		

\*Same as preceding year.

## THE PRICE OF GAS, 1900-1913.

The price of illuminating and fuel gas in 38 localities from 1900 to 1913 is shown in the large table herewith.

From the tables of index numbers subjoined, the general trend in the several provinces may be observed. It will be seen that prices have shown a considerable decline, especially in the case of illuminating gas. For the Dominion as a whole illuminating gas is down 23 per cent, while fuel gas has declined 18 per cent.

Of the 38 localities, 13 show stationary prices, 18 show decreases, and 4 show increases, one of the latter being a reaction from an extremely low price on the installation of natural gas.

The decline in the price of gas has been the result largely of competition from two sources, namely, electricity and natural gas. Illuminating gas has been subject to the competition of both; fuel gas, however, up to the present has not been greatly affected by the cheapening of electricity, though the tendency is visible. Hence no doubt the greater decline in illuminating gas as compared with fuel gas. The increased use of gas resulting from the rapid growth of population and the expansion of manufacturing has been a factor in consumption; on the other hand, electricity has on the whole the preference for lighting purposes, and gas as fuel is still looked upon as somewhat of a luxury.

The price of natural gas at its highest is about half that of artificial gas. For ten towns with natural gas in Ontario and the West the average rate is 34 cents, while the cheapest artificial gas is about 70 cents. Of the ten towns referred to, three were in 1900 using artificial gas at an average cost of \$1.58; these now have an average rate of 32 cents.

The returns from the Maritime Provinces are very meagre but indicate stationary conditions. In Quebec, however, there has been a considerable decline; Montreal, the largest consuming centre in Canada, is down 20 per cent. In Ontario the tendency to seek lower levels is more apparent. Several instances occur of prices being cut in half, and even greater reductions are frequent. Natural gas and the Hydro Electric Commission are the factors chiefly responsible. In a few cases there has been a rise in the price charged for natural gas, but the fact that the original price on installation was extremely low must be considered.

In the Prairie Provinces returns from Winnipeg and Medicine Hat show large reductions, the former a result of cheap electricity and the latter a result of the installation of natural gas. In British Columbia a tendency to fluctuate is visible in the three cities recorded. In New Westminster, lighting has on the whole increased considerably. In Vancouver, lighting gas is down, but fuel gas after a drop in 1906 has partly recovered. In Victoria there has been a rise in fuel gas.

PRICE OF ILLUMINATING GAS 1900-1913—INDEX NUMBERS.

Province.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Maritime provinces.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0
Quebec.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	92-0	92-0	91-0	96-0	95-0	92-0	91-0
Ontario.....	100-0	100-0	100-0	100-0	99-0	94-0	82-0	83-0	80-0	80-0	76-0	75-0	76-0	75-0
Manitoba.....	100-0	100-0	100-0	100-0	100-0	67-0	67-0	67-0	67-0	67-0	67-0	67-0	67-0	67-0
Alberta.....	100-0	100-0	100-0	100-0	100-0	100-0	43-0	43-0	43-0	43-0	43-0	43-0	43-0	43-0
British Columbia.....	100-0	100-0	100-0	100-0	100-0	93-0	93-0	104-0	112-0	89-0	97-0	97-0	97-0	97-0
Canada.....	100-0	100-0	100-0	100-0	99-0	94-0	84-0	85-0	84-0	82-0	81-0	77-0	78-0	77-0

PRICE OF FUEL GAS PER 1000 CU. FT. 1900-1913—INDEX NUMBERS.

Province.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Maritime provinces.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0	100-0
Quebec.....	100-0	100-0	100-0	100-0	100-0	100-0	100-0	92-0	92-0	91-0	96-0	95-0	92-0	91-0
Ontario.....	100-0	100-0	100-0	98-0	96-0	97-0	87-0	88-0	85-0	85-0	81-0	80-0	82-0	81-0
Manitoba.....	100-0	100-0	100-0	100-0	100-0	60-0	60-0	60-0	60-0	60-0	60-0	60-0	60-0	60-0
Alberta.....	100-0	100-0	100-0	100-0	100-0	100-0	43-0	43-0	43-0	43-0	43-0	43-0	43-0	43-0
British Columbia.....	100-0	100-0	100-0	100-0	100-0	100-0	93-0	93-0	93-0	93-0	96-0	102-0	102-0	102-0
Canada.....	100-0	100-0	100-0	99-0	98-0	97-0	87-0	88-0	86-0	86-0	84-0	81-0	82-0	82-0

## PRICE OF GAS PER 1,000 CU. FT., 1900-1913.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Nova Scotia.</i>								
Yarmouth.....	\$2.00	*	*	*	*	*	*	*
<i>New Brunswick.</i>								
Fredericton. . . St. John	\$3.00	*	*	*	*	*	*	*
<i>Quebec.</i>								
Montreal.....	Light { \$1.20 } net. Fuel { \$1.00 }	*	*	*	*	*	*	*
Quebec.	Light \$2.50 { less 20% } Fuel \$1.50 {	*	*	*	*	*	\$1.00	*
St. Hyacinthe.	Light \$1.25 Fuel \$1.50 { less 20% }	*	*	*	*	*	\$1.00 less 25% Fuel \$1.00 Light \$1.15	*
Sherbrooke.	Light \$1.50 less 20% Fuel \$1.20	*	*	*	*	*	*	*
Sorel.	Light \$1.20 Fuel \$1.00	*	*	*	*	*	*	*
Westmount.	Light \$1.20 Fuel \$1.00	*	*	*	*	*	*	*
<i>Ontario.</i>								
Berlin . . . . .	Light \$1.50 { net. Fuel \$2.00 }	*	*	*	Meter 10c. Fuel \$1.00	Fuel \$1.25 Meter 10c.	*	*
Brantford.	50c. 10% discount.	*	*	*	*	*	*	*
Brockville.	Light \$2.00 Fuel \$1.25	*	*	Light \$2.00 Fuel \$1.00	*	Fuel \$1.00 Light \$1.50	Light \$1.25 Fuel \$1.00	Light \$1.12½ Fuel \$1.12½
Barrie.	Light \$1.75 { net. Fuel \$1.50 }	*	*	*	*	*	*	*
Chatham.	Light \$2.00 if on separate meters, Fuel \$1.00 \$1.50 for both on same meter.	*	*	*	*	*	Both light & Fuel .25 Fuel only .35.	*



PRICE OF GAS PER 1,000 CU. FT. 1900-1913.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Nova Scotia.</i>							
Yarmouth.....	*	*	*	*	*	*	
<i>New Brunswick.</i>							
Fredericton.....	*	*	*				Mfr. of Gas abandoned in 1910.
St. John.....						Light \$1.85 Fuel 1.10	10c. off every 1000, cu. ft.
<i>Quebec.</i>							
Montreal.....	*	*	Light \$1.10 Fuel *	*	Fuel * Light \$1.00	Light .95 Fuel .95	
Quebec.....	*	*	1.50 less 20%	*	*	*	
St. Hyacinthe.....	*	*	*	*	*	*	
Sherbrooke.....	*	*	*	*	*	*	
Sorel.....	*	*	\$1.50 less 20%	*	*	*	
Westmount.....	*	Light \$1.10 Fuel \$1.00	Light \$1.05 Fuel \$1.00	Light \$1.00 Fuel \$1.00	Light \$0.95 Fuel \$0.95	Light \$.90 Fuel \$0.90	
<i>Ontario.</i>							
Berlin.....	*	*	Meter .10 Fuel \$1.00	*	*	*	No quotation for light after 1903.
Brantford.....	*	*	*	*	*	*	Natural gas.
Brockville.....	*	*	*	*	Light \$1.00 Fuel, \$1.00.	*	
Barrie.....	*	*	*	*	*	*	
Chatham.....	*	*	*	*	*	*	1900-06 Artificial, 1906 on Natural gas.

\*Same as preceding year.

## PRICE OF GAS PER 1,000 CU. FT., 1900-1913—(Continued.)

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Ontario—Con.</i>								
Cobourg.....	\$1.25	*	*	*	*	*	Fuel \$1.50	*
Cornwall.....	Light \$2.50 (No dis.	*	*	*	*	*	Light \$2.00	25% disc.
	Fuel \$2.00	*	*	*	*	*	*	*
Galt.....	\$0.45	*	*	*	*	*	*	*
Guelph.....	Light \$1.80 net.	*	*	*	*	Fuel \$1.50	*	*
	Fuel \$1.00 net.	*	*	*	*	Light \$1.50	*	*
Hamilton.....	\$1.50 artificial.	*	*	*	*	*	\$1.00 artificial,	*
							.40 natural,	
							net.	
Kingston.....	\$2.00	*	*	\$0.20	*	\$1.50	*	*
Niagara Falls.....					*	0.25	*	\$0.28
Oshawa.....					*	\$1.20 net	*	*
Owen Sound.....	\$1.80 net.	*	*	*	*	*	*	*
Peterborough.....	Light \$2.00	*	*	*	*	*	*	*
Port Hope.....	Fuel \$1.25	*	*	*	*	*	*	*
St. Catharines.....	\$1.10 less 10c. per 1,000 cu. ft.	*	*	*	*	\$1.40 less 10c.	\$1.25 less 10c.	*
St. Thomas.....	\$1.50	*	*	*	*	per M. cu. ft.	per M. cu. ft.	*
		*	*	*	*	*	*	*
Sarnia.....	Light \$1.25	*	*	*	*	*	\$0.75	*
	Fuel \$0.95	*	*	\$0.80	*	*	*	*
Toronto.....	\$0.90	*	*	*	*	*	*	*
Welland.....	\$0.30	*	*	*	*	*	Light \$1.00	*
Woodstock.....	Light \$1.50	*	*	\$1.00	*	*	Fuel \$1.00	*
	Fuel \$1.00	*	Fuel		*	*	\$2.00 per an..	*
							meter rent.	
<i>Manitoba.</i>								
Brandon.....	\$2.00, disc. according to amount con-	*	*	*	*	\$1.50 disc 10%	*	*
Winnipeg.....	sumed.					for light, 20%		
						fuel on bills		
						over \$1.00		

PRICE OF GAS PER 1,000 CU. FT. 1900-1913.—Continued.

Locality.	1908	1909	1910	1911	1912	1913	Remarks.
<i>Ontario—Continued.</i>							
Cobourg.....	*	*	*	*	*	*	
Cornwall.....	*	*	*	*	*	*	
Galt.....	*	*	*	*	*	*	
Guelph.....	\$1.00	*	\$0.90	*	*	\$0.85	
Hamilton.....	*	*	*	*	*	*	
Kingston.....	\$1.00	*	*	*	*	*	
Niagara Falls.....	.30	*	*	*	.40	*	Plant in- stalled 1903, cannot exceed .50.
Oshawa.....	\$1.25	*	\$1.25 net	\$1.15	*	*	
Owen Sound.....	*	*	*	*	\$1.00	*	
Peterborough.....	*	*	*	*	*	*	
Port Hope.....	*	*	*	Light Fuel	\$1.75	Light Fuel	\$1.25
St. Catharines.....	*	*	*	1.25	*	1.25	
St. Thomas.....	\$1.10 less 10c. per M cash discount.	*	\$1.00 less 10c. per M cash discount.	*	*	*	Previous to 1905, controlled by private Company.
Sarnia.....	*	*	Light Fuel .30	*	*	*	Natural gas introduced 1910.
Toronto.....	*	*	*	.70	*	*	Net selling price.
Welland.....	*	*	*	*	*	*	
Woodstock.....	*	*	*	*	*	*	
<i>Manitoba.</i>							
Brandon.....	*	\$1.75 disc. 5—15%*	*	*	*	*	Plant installed in 1909.
Winnipeg.....	*	*	*	*	*	*	

\*Same as preceding year.

PRICE OF GAS PER 1,000 CU. FT., 1900-1913—Continued.

Locality.	1900	1901	1902	1903	1904	1905	1906	1907
<i>Alberta.</i>								
Lethbridge.....	Residential 35c., manufactures 5c.....	*	*	*	*	*	Manufacture 5c., resident 15c.	*
<i>British Columbia.</i>								
New Westminster..	Light \$2.00, fuel \$1.50.....	*	*	*	*	*	*	Light \$2.70, fuel *
Vancouver.....	Light \$2.25 net, fuel \$1.50 net.....	*	*	*	*	Fuel * Light \$1.75.	Light * fuel 1st M cu.ft. \$1.25 next 4 M cu.ft. \$1.10.	* *
Victoria.....	Light \$2.00 meter, fuel \$1.50, meter rent 25c. per mo. 25% disc.	*	*	*	*	*	*	*

PRICE OF GAS PER 1,000 CU. FT., 1900-1913—Continued.

Locality.	1908	1909	1910	1914	1912	1913	Remarks.
<i>Alberta.</i>							
Lethbridge.....					Summer 4 mo. under 250,000 cu. ft. monthly 33c. net. Winter 35c. with 5% dis. Over this dis. 10-15%.	*	Natural Gas service installed 1912.
<i>British Columbia.</i>							
Medicine Hat.....	*	*	*	*	*	*	
New Westminster.....	Light fuel *, \$3.15	Light fuel *, \$1.80	Light fuel *, \$2.25	*	*	*	
Vancouver.....	Light fuel *, *	Light fuel *, *	Light fuel *, * Fuel — 1st M cu. ft. \$1.40, next 4 M cu. ft. \$1.25, mtrs. 30 M-50 M \$1.15.	*	*	*	
Victoria.....	*	*	Light \$2.00, fuel—1st M cu. ft. \$2.00, over that \$1.50, meter rent and disc. same.		*	*	

\*Same as preceding year.



## RAILWAY FREIGHT RATES, 1900-1914.

The great distances of Canada render transportation a most important national problem. It is significant that this country leads the world in the proportion of railway mileage to population, and that the largest single employer should be a railway corporation. Freight rates, everywhere important as a cost item, are especially so in Canada.

With a view to ascertaining the trend of freight rates during recent years a list of typical hauls (in carload lots) was made out, and the current rate (January, 1914) and the rate in or near 1900 were ascertained from the files of tariffs of the Board of Railway Commissioners. The table of comparative rates is given herewith. The list is limited (71 items), but the selection was without prejudice, and at least several of the most important hauls in Canada are included. The Board's files begin with 1904, but in most cases the rate then in effect dates from some time previously.

Reducing the data to an index number with the earlier rate in each case made equal to 100, the following results are obtained:—

	1900-4	1914
Commodity Rates.....	100	95.2
Class Rates.....	100	93.6

By this showing, Canadian railways have reduced freight charges to the public by five or six per cent since 1900.<sup>1</sup>

In interpreting this result, it has, of course, to be remembered that the data are meagre, and that they are largely confined to long hauls where an increase in rates would meet with the greatest degree of resistance. Moreover, the index numbers do not allow for instances (five in number) where commercial rates have been replaced by class rates, or where (as in three cases) lake and rail rates have been abolished.

As to the general situation, railway facilities have of course greatly increased since 1900. Competing lines have multiplied, and great improvements have been made in grades, curves, and equipment on previously existing lines. It is estimated that in the past quarter century the capacity of the box car has increased by half and the length of trains by twice or three times.<sup>2</sup>

## NOTE ON RAILWAY RATEMAKING IN CANADA.

The characteristics of the Canadian transportation situation have been defined as: (1) An excellent natural endowment of waterways, buttressed by an extensive canal system, both within the zone of international competition; (2) a wide development of railways built to suit the exigencies of national policy, under largely unified control intimately related to water competition and international traffic; (3) a mobile, flexible,

<sup>1</sup>Notwithstanding increased dividends to shareholders and increased wages to employees.

<sup>2</sup>Canadian railway development since 1900. (See Volume II.) The efficiency of the secondary transportation agencies, it may be added, has also tended to improve, following the Good Roads Movement and the use of motor trucks. As to the latter, Mr. Edison is quoted as saying: "Fifty per cent of all the freight in the world is moved to and from railway stations by horse drawn vehicles; the automobile truck of half the length takes double the freight and goes twice as fast." On the importance of the former, a special investigation into the costs of hauling from farm to shipping points conducted by the United States Department of Agriculture in 1907 shows that the cost per ton per mile ranged from 15 cents in the case of flaxseed to thirty-one cents in the case of vegetables. The average cost of railway haulage per ton per mile is usually estimated by the railways at  $\frac{1}{2}$  cent per mile. In other words the expenditure required to haul a given amount of freight one mile by waggon and road would haul the same freight say 60 miles by railroad.

quasi-judicial commission, endowed with power to control the instruments of transportation in so far as natural and artificially created circumstances permit, this last an outgrowth of earlier systems of control (a) by common law, (b) by charter restrictions, and (c) by statutory regulation.

The fundamental conditions of railway ratemaking in Canada may be stated as follows: Eastern Canadian rates are governed by water competition. Coast to coast rates are likewise water-compelled. Between Ontario and the Prairies, water competition extends to Fort William; thence westward the influence of contractual agreements (including those of the Manitoba and Dominion Governments) rules. Thus from the greater part of Canada the possibility of a general increase in rates is eliminated. There remains the vexed question of rates in the west. Here the charges were fixed originally by what the traffic would bear so that an increase could be made only on the ground of diminished traffic, whereas the development of competition and regulation has made for declines. The recent decision of the Railway Commission has reduced freight rates in the west, though not in every instance to a cost of operation basis.<sup>1</sup>

With regard to isolated rates, it may be added that an early canon adopted by the Board virtually precluded advances.<sup>2</sup> More recently, however, the principle has been admitted that an increasing cost curve may be met by increases in single cases rather than by a general rise. Little or nothing has been made of the principle than an increase in the value of the commodity should warrant an increased freight rate.

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<sup>1</sup> It is, of course, impossible to apply to each of the three roads a rate which would vary according to the cost of operation. On through business, if cost of operation were the sole criterion, the lowest cost would have to fix the rate. In areas being opened for settlement also, even where there is no direct competition the lowest cost rate would tend to induce more settlers. The Board's concern was with imposing a fair rate irrespective of what the company was worth. It was unable to hold that a tariff worked out on a cost basis alone was feasible.

<sup>2</sup> i.e. the position taken by the Board that a rate voluntarily established by a railway and kept in force by it for some time is presumably reasonable.

## FREIGHT RATES IN 1900-1904 AND IN 1914 (UNTIL MARCH 1ST.) CARLOAD LOTS.

From	To	Commodity.	Commodity rates (cents per 100 lbs.)				Class rates (cents per 100 lbs.)			
			1900-1904		1914		1900-1904		1914	
			Effective Date.	Rate	Effective Date	Rate	Effective Date	Rate	Effective Date	Rate
Regina, Sask.....	Montreal, Que....	Oats & Barley	May 21, '02	34 (L&R)	Oct. 21, '12	33 (L&R)	Dec. 8, '02	39 (Winter)	Oct. 21, '12	38 (Winter)
Regina, Sask.....	Montreal, Que....	Wheat	May 21, '02	33	Oct. 21, '12	33	Oct. 7, '03	38	Oct. 21, '12	38
Ft. William, Ont....	St. John, N.B....	Wheat, Oats and Barley	Oct. 7, '03	25	Dec. 10, '12	25	Oct. 7, '03	30	Dec. 10, '12	30 (A.R.)
Chatham, Ont.....	Toronto, Ont....	"	Aug. 1, '05	12½	Dec. 12, '12	9	Dec. 8, '02	30	Dec. 12, '12	30 (A.R.)
Calgary, Alta.....	Montreal, Que....	Cattle & Swine	Nov. 22, '01	90	Jan. 1, '14	90				
Montreal, Que....	St. John, N.B....	"	July 15, '05	25	July 21, '10	23				
Stratford, Ont....	Toronto, Ont....	"	Jan. 10, '08	10	Sept. 12, '10	10				
Sherbrooke, Que..	Montreal, Que....	Hay	Dec. 15, '03	8	Sept. 12, '10	10				
Palmerston, Ont....	Toronto, Ont....	Potatoes	July 1, '04	17	Feb. 25, '09	17½	June 9, '00	11	Apr. 15, '13	10
St. John, N.B....	Montreal, Que....	"	May 10, '05	8	Jan. 1, '14	8	Aug. 31, '09	9		
Brantford, Ont....	Toronto, Ont....	Turnips, Onions	June 1, '01	16½	Jan. 1, '14	20				
Chatham, Ont....	Montreal, Q....	Beans	Nov. 15, '04	13	June 12, '12	12½				
Brandon, Ont....	Toronto, Ont....	Flour & R. Oats	Jan. 26, '01	45	Mar. 12, '12	45				
Winnipeg, Man....	Vancouver, B.C.	"	May 21, '02	25 (L&R)	Oct. 21, '12	25 (L&R)				
Montreal, Que....	St. John, N.B....	"	Oct. 7, '03	13	Dec. 10, '12	12½	Oct. 7, '03	30 (A.R.)	Oct. 21, '12	30 (A.R.)
Toronto, Ont....	Montreal, Que....	"	Aug. 24, '04	12	Mar. 1, '10	12	Dec. 8, '02	11	Dec. 10, '12	17½
Goderich, Ont....	Toronto, Ont....	"	Aug. 24, '04	8	Jan. 1, '14	8	Nov. 15, '04		May 1, '11	
Montreal, Que....	Winnipeg, Man..	Sugar	Jan. 3, '05	81	May 30, '10	75			Apr. 1	69 (A.R.)
Vancouver, B.C....	Calgary, Alta....	"	Dec. 26, '04	78			1904	65 (L&R)	May 25	63 (L&R)
Montreal, Que....	Edmonton, Alta	Butter			May 1 & 29, '12	1 62 (A.R)			Apr. 25, '12	12
Woodstock, Ont....	Toronto, Ont....	Butter L.C.I.			May 1 & 29, '12	1 35			May 22, '12	1 87
					Dec. 8 & 16, '05	2 26			Oct. 24 & 31, '08	25
					Dec. 17, '02	26			Apr. 25, '12	72
					Dec. 8 & 16, '05	1 72			Oct. 24 & 31, '08	25

Montreal, Que.	Edmonton, Alta.	Eggs	May 1 & 29, '12	62	"	1904	1	80½	"	May 22, '12	1	43 (A.R.)
Windsor, Ont.	Toronto, Ont.	Eggs (L.C.L.)	July, '16	13	15	Oct. 17, '92	26	26	"	Oct. 24 & 31, '08	25	25
Brookville, Ont.	Montreal, Que.	Cheese	July, '16	13	15	June 9, '00	21	21	"	Aug. 31, '09	18	18
Stratford, Ont.	Toronto, Ont.	"	July, '16	13	33	Aug. 1, '04	1	46 (A.R.)	"	Apr. 1, '12	1	33 (A.R.)
St. Catharines, Ont.	Calgary, Alta.	Canned goods	July, '16	13	33	1904	1	36 (L&R)	"	Apr. 25, '12	1	27 (L&R)
Victoria, B.C.	Toronto, Ont.	Canned salmon	July 1, '02	1	10	June 9, '00	19	19	"	Dec. 16, '12	1	85
Clinton, Ont.	"	Apples	1904	48 (L&R)	25, '08	46 (L&R)				Aug. 3, '09	16	16
Toronto, Ont.	Winnipeg, Man.	"	Aug. 1, '04	55 (A.R.)	May 2 & 29, '12	53 (A.R.)						
Vernon, B.C.	Winnipeg, Man.	Apples	July 22, '04	75	75	Sept. 10, '12	75	75				
Toronto, Ont.	Ottawa, Ont.	Apples & pears	Aug. 8, '04	18	18	Sept. 1, '08	18	18				
Toronto, Ont.	Ottawa, Ont.	Peaches, plums										
Halifax, N.S.	Montreal, Que.	Fish	Nov. 15, '07	26	26	Aug. 8, '12	26	26		July 17, '05	25	25
Vancouver, B.C.	Toronto, Ont.	"	Oct. 1, '04	85	85	Dec. 16, '12	85	85		July 17, '05	28	28
Pt. Stanley, Ont.	Toronto, Ont.	"								March 5, '08	16	16
Vancouver, B.C.	Calgary, Alta.	Lbr. & Tbr.	Apr. 20, '03	36½	36½	July 10, '13	36½	36½				
Vancouver, B.C.	Montreal, Que.	"	Jan. 19, '03	70	70	Aug. 1, '11	70	70				
Pr. Albert, Sask.	Winnipeg, Man.	Boards (rough)	Jan. 11, '04	24	20	June 3, '12	20	20				
Sarnia, Ont.	Hamilton, Ont.	Dressed Lbr.	Nov. 11, '04	8	8½	May 1, '11	8½	8½				
Parry Sound, Ont.	Toronto, Ont.	Boards (rough)	June 25, '04	10	10	May 1, '11	8½	8½				
Vancouver, B.C.	Toronto, Ont.	Shingles	Jan. 19, '03	75	75	Aug. 1, '11	9½	9½				
Parry Sound, Ont.	Ottawa, Ont.	Logs	Apr. 1, '02	10	10	May 3, '12	8½	8½				
Toronto, Ont.	Sarnia, Ont.	Brick										
Belleville, Ont.	Regina, Sask.	Cement										
"	"	"										
Hull, P.Q.	Winnipeg, Man.	"	Oct. 3, '05	30 (L&R)						Apr. 25, '12	54 (L&R)	54 (L&R)
Hull, P.Q.	"	"	Mar. 29, '06	40 (A.R.)						Apr. 1, '12	59 (A.R.)	59 (A.R.)
Brantford, Ont.	Edmonton, Alta.	Agri. Implements	1904	143½ (L&R)	Not taken via lake and rail					Apr. 25, '12	40 (L&R)	40 (L&R)
"	"	"								Apr. 1, '12	45 (A.R.)	45 (A.R.)
Toronto, Ont.	Regina, Sask.	"	1904	92 (L&R)	Not taken via lake and rail					Apr. 1, '12	120 (A.R.)	120 (A.R.)
Toronto, Ont.	Regina, Sask.	Agri. Implements								Apr. 1, '12	89 (A.R.)	89 (A.R.)
London, Ont.	Moosejaw, Sask.	Stores								May 25, '12	110 (L&R)	110 (L&R)
London, Ont.	"	"								May 22, '12	120 (A.R.)	120 (A.R.)
Newmarket, Ont.	Calgary, Alta.	Furniture	1904	131 (L&R)	Not taken via lake and rail					May 6, '12	130 (A.R.)	130 (A.R.)
"	"	"								Apr. 1, '12	133 (A.R.)	133 (A.R.)

## FREIGHT RATES IN 1900-1904 AND IN 1914 (UNTIL MARCH 1ST).—Continued.—CARLOAD LOTS.

From	To	Commodity.	Commodity Rates (cents per 100 lbs.)				Class Rates (cents per 100 lbs.)			
			1900-1904		1914		1900-1904		1914	
			Effective Date	Rate	Effective Date	Rate	Effective Date	Rate	Effective Date	Rate
Montreal, Que.....	Edmonton, Alta	Dry goods.....					1904	180½ (L&R)	Apr. 25, '12	143 (L&R)
"	"	"							May 22, '12	143 (L&R)
Toronto, Ont.....	St. John, N.B.	"							Apr. 1, '12	153 (AR)
Sydney, N.S.....	Montreal, Que...	B. Coal.....					Aug. 1, '04	172 (AR)	May 6, '12	153 (AR)
Lethbridge, Alta...	Regina, Sask...	"	Mch. 18, '09	\$3 per gr. ton 2,240 lb.	Commodity filed	tariff not	May 14, '00	44	Feb. 1, '12	40
Buffalo, N. Y.....	Ft. William, Ont	"	Feb. 1, '04	\$3.45 per ton 2,000 lb.	Mch. 5, '12	\$3.10 per ton 2,600 lb.	Sept. 14, '08	21	May 28, '13	21
Suspension Bridge	Toronto, Ont.	"	No Water rate filed.							
N. Y. "	"	"	Oct. 19, '03	60c per ton of 2,000 lb.	Sept. 1, '11	160c. per ton of 2,000 lb.				
Midland, Ont.....	"	A. Coal.....	Oct. 19, '03	60c per ton of 2,000 lb.	May 1, '12	60c. per ton of 2,000 lb.				
Midland, Ont.....	"	Pig Iron.....	July 6, '04	\$1.20 per ton 2,240 lb.	Oct. 10, '13	\$1.20 per ton 2,240 lb.				
Midland, Ont.....	"	Steel billets.....								
Sydney, N. S.....	Montreal, Que...	Pig iron and steel billets.	Jan 1, '10	\$3.25 per ton 2,240 lb.	Jan. 1, '10	\$3.25 per ton 2,240 lb.	Dec. 1, '03	16	Aug. 31, '09	16
Copper Cliff, Ont...	S.S. Marie, Ont..	Copper ore.....	Aug. 4, '04	\$3.25 per ton 2,240 lb.					Mch. 27, '11	15



## EXPRESS RATES.

Fruit, Carloads.	1909	1913
From St. Catharines, to Winnipeg.....	Effective June '09, \$2.55...	Effective May 3, '13, \$2.30.
From Winona, to Winnipeg.....	\$2.25	\$2.00
From Toronto, to Ottawa.....	Effective July 15, '07, 80c.	Effective May 2, '13, 80c.

## HOSPITAL CHARGES AND COSTS OF MAINTENANCE.

In this final division of the section the results of an inquiry into hospital fees and the cost of maintaining patients in hospitals since 1900 are presented. An obvious purpose of such an inquiry is to measure fluctuations in the prices of yet another "necessary", namely skilled care during severe illness. A second object was to throw a sidelight on the field of personal and household expenditures, through an examination of the maintenance costs of public institutions. In the absence of family budgets, such costs perhaps offer the best evidence of how the advancing prices of the past few years have worked out in a practical way.

The "kind" of prices that are illustrated by statistics of this sort is thus explained by Mitchell (*Business Cycles*, p. 29): "There remains one other division of the system of prices—a division which has much in common with the prices of consumers' goods on the one hand and with the prices of labour as a business adjunct on the other hand. It consists of the prices of the heterogeneous services rendered to persons as such—not to business enterprises. Here belong the prices of domestic service, medical attendance, much instruction, many forms of amusement, etc.<sup>1</sup> The furnishing of such services presents a certain contrast to the business traffic in consumers' goods, materials, machinery, loans, transportation, etc. For systematic organization has not been developed to so high a point, business motives do not have such unrestricted scope, and the wares are not standardized in equal measure. Moreover, the prices which people are willing to pay for such services are based on personal needs and personal income, rather than on closely calculated chances of profit. The prices of these services therefore form the most loosely organized and irregular division of the system of prices".

## METHOD OF INQUIRY.

A list of hospitals was obtained, from Government reports in the case of Ontario and the Western Provinces and from local city directories in the case of Quebec and the Maritime Provinces. A circular and form was sent to each institution requesting information (1) as to the tariff charged in each year since 1900 for public ward, semi-private ward, and private-ward patients; (2) as to operating-room charges, and (3) as to average costs per patient daily. Altogether 274 circulars were sent out. Deducting institutions of recent foundation and those whose operations were not primarily in the way of caring for the sick, replies were obtained from some 184 institutions. Of these 131 supplied complete or nearly complete records. Tables I<sup>a</sup>, II, III, IV and V give these statistics in full. In Table I the results are reduced to the form of index numbers by Provinces.

<sup>1</sup> Of this list the wages of domestic servants and the salaries of public school teachers are treated in the present memorandum in Appendix (7) as belonging primarily to the subject of wages and salaries.

## RESULTS.

The average charges to hospital patients, it will be seen from Table VI rose fifty or sixty per cent between 1900 and 1914, Operating room charges, as distinguished from ward room tariffs, went up appreciably less. The cost per patient daily is up on the whole 45 per cent.

These conclusions, however, must be accepted only with the following reservations: (1) In the matter of ward-room tariffs: the extent to which the element of charity enters is a factor. Charges are frequently adjusted to the capability of the patient for paying, and to that extent the record is nominal only. A broad effect of this practice is to make for stability of rates, especially in the case of public ward and operating room charges, though all fees tend to move together. (2) In connection with costs, it should be pointed out that the record reflects not only the prices of supplies and services, but also the number of patients. A year in which the number treated was large will show a less cost per caput than a year when the attendance was light, over-head charges and many costs of maintenance being the same in both cases. It also reflects changes in standards, such as the installation of better appliances, (paid for out of current expenses) the substitution of trained nurses for nurses in training, etc. On the latter point the statement may be made that the tendency has been to increase efficiency, better standards even in diet having been demanded in recent years. The "fluidity" of tariffs above mentioned of course militates against direct comparisons of fees with costs.

That operating room fees have been the most stationary is however a fact which may probably be accepted without reservation.

TABLE I.—Index Numbers of Tariffs and Costs.

## AVERAGE CHARGES TO PUBLIC WARD PATIENTS.

	1900	1901	1902	1903	1904	1905	1906	1907
Maritime Provinces.....	100.0	100.0	100.0	100.0	100.0	100.0	103.3	113.3
Quebec.....	100.0	100.0	100.0	100.0	100.0	100.0	108.6	108.6
Ontario.....	100.0	100.0	100.4	102.7	112.2	113.9	121.0	126.3
Prairie Provinces.....	100.0	100.0	100.0	100.0	100.0	100.0	113.3	121.2
British Columbia.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Canada.....	100.0	100.0	100.2	101.5	105.9	107.0	113.5	117.8

	1908	1909	1910	1911	1912	1913	1914
Maritime Provinces.....	113.3	122.9	128.7	128.7	135.2	137.9	162.9
Quebec.....	108.6	106.7	108.0	108.0	108.0	113.0	113.0
Ontario.....	133.2	133.8	143.0	147.5	158.2	170.6	175.0
Prairie Provinces.....	123.6	133.3	136.5	137.5	140.1	155.5	169.9
British Columbia.....	100.0	102.5	104.8	105.5	105.5	105.5	106.1
Canada.....	121.7	126.5	130.3	132.7	139.3	147.9	154.9

TABLE I.—Index Numbers of Tariffs and Costs—*Continued.*

## (2) AVERAGE CHARGES TO SEMI-PRIVATE WARD PATIENTS.

	1900	1901	1902	1903	1904	1905	1906	1907
Maritime Provinces.....	100·0	100·0	100·0	100·0	100·0	100·0	112·1	117·6
Quebec.....	100·0	100·0	100·0	112·5	112·5	112·5	116·6	116·6
Ontario.....	100	100	100·5	102·3	105·9	111·1	114·3	117·3
Prairie Provinces.....	100·0	100·0	100·0	100·0	100·0	100·0	111·2	117·9
British Columbia.....	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0
Canada.....	100·0	100·0	100·3	102·3	104·4	107·3	112·1	114·9

	1908	1909	1910	1911	1912	1913	1914
Maritime Provinces.....	117·6	117·6	127·4	127·4	127·4	138·3	151·6
Quebec.....	116·6	141·6	144·7	150·5	150·5	160·3	160·3
Ontario.....	121·4	126·6	132·3	137·9	147·1	154·6	161·3
Prairie Provinces.....	117·9	126·6	127·6	136·1	141·3	151·9	158·1
British Columbia.....	100·0	100·0	108·6	114·3	114·3	114·3	163·3
Canada.....	116·9	124·3	129·4	135·1	140·2	147·8	160·1

## (3) AVERAGE CHARGES TO PRIVATE WARD PATIENTS.

	1900	1901	1902	1903	1904	1905	1906	1907
Maritime Provinces.....	100·0	100·0	102·9	102·9	102·9	102·9	113·6	113·6
Quebec.....	100·0	100·0	100·0	106·6	106·6	106·6	109·1	109·1
Ontario.....	100·0	101·1	102·4	104·1	108·7	112·6	118·7	122·5
Prairie Provinces.....	100·0	100·0	100·0	100·0	100·0	100·0	110·2	118·9
British Columbia.....	100·0	100·0	100·0	100·0	104·3	104·3	104·3	104·3
Canada.....	100·0	100·5	101·4	103·0	105·9	107·7	113·3	116·5

	1908	1909	1910	1911	1912	1913	1914
Maritime Provinces.....	113·6	116·4	120·6	122·7	125·5	138·4	142·2
Quebec.....	112·6	117·1	121·0	122·4	126·7	126·9	131·2
Ontario.....	129·1	132·6	138·9	144·3	148·8	155·7	164·8
Prairie Provinces.....	118·9	120·3	129·0	137·7	144·3	150·0	160·0
British Columbia.....	105·3	107·8	110·1	114·3	115·9	120·5	121·9
Canada.....	120·0	122·5	128·4	133·5	137·9	143·9	150·7

TABLE I.—Index Numbers of Tariffs and Costs—*Continued.*

## (4) AVERAGE OPERATING ROOM CHARGES.

	1900	1901	1902	1903	1904	1905	1906	1907
Maritime Provinces.....	100.0	100.0	100.0	100.0	100.0	100.0	112.5	129.4
Quebec.....	100.0	100.0	100.0	100.0	100.0	100.0	107.1	107.1
Ontario.....	100.0	100.0	101.5	104.0	104.0	107.0	109.1	109.1
Prairie Provinces.....	100.0	100.0	100.0	100.0	100.0	100.0	102.6	102.6
British Columbia.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Canada.....	100.0	100.0	100.9	102.2	102.2	105.9	106.7	107.7

	1908	1909	1910	1911	1912	1913	1914
Maritime Provinces.....	129.4	129.4	150.2	150.2	150.2	150.2	150.2
Quebec.....	107.1	107.1	116.2	116.2	119.2	123.4	133.4
Ontario.....	112.9	112.9	114.4	121.9	124.6	124.9	126.1
Prairie Provinces.....	102.6	113.7	115.8	135.4	141.5	141.5	141.5
British Columbia.....	100.0	107.9	110.5	119.1	119.1	120.4	120.4
Canada.....	109.7	112.3	115.9	125.2	128.1	129.1	130.9

## (5) AVERAGE COST PER PATIENT, DAILY.

	1900	1901	1902	1903	1904	1905	1906	1907
Maritime Provinces.....	100.0	103.9	110.5	105.1	113.4	117.3	116.2	123.2
Quebec.....	100.0	101.8	104.4	109.3	106.9	117.0	123.6	127.4
Ontario.....	100.0	96.8	100.4	104.0	111.2	129.8	122.3	124.9
Prairie Provinces.....	100.0	97.5	101.3	100.4	102.0	114.5	110.7	138.8
British Columbia.....	100.0	104.8	107.5	99.2	96.9	102.9	110.8	98.5
Canada.....	100.0	99.5	103.2	103.6	107.5	120.8	118.4	122.6

	1908	1909	1910	1911	1912	1913
Maritime Provinces.....	131.6	131.6	132.7	133.4	138.4	136.6
Quebec.....	131.5	132.0	135.9	140.4	139.2	145.6
Ontario.....	135.0	138.1	139.8	143.9	145.9	160.8
Prairie Provinces.....	132.1	127.5	131.1	133.3	134.6	137.8
British Columbia.....	109.7	105.3	115.6	113.6	118.3	114.7
Canada.....	129.9	129.5	133.3	135.8	137.8	144.7

HOSPITAL TARIFFS AND COSTS OF MAINTENANCE.  
TABLE I.A.—PUBLIC WARD PATIENTS—TARIFF PER DIEM.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Maritime Provinces—</i>																
1.....																Patients "pay only what they can afford."
2.....					0 44	0 44	0 44	0 44	0 44	0 65	0 65	0 65	0 65	0 72	0 72	
3.....				0 50	0 50	0 50	0 50	0 75	0 75	0 75	0 75	0 75	0 75	1 50	1 50	
4.....	0 43	0 43	0 43	0 43	0 43	0 43	0 50	0 50	0 50	0 65	0 65	0 65	0 65	0 65	0 65	
5.....	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 36	0 50	0 50	0 50	
7.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	
10.....										0 50	0 50	0 50	0 50	0 50	0 50	
<i>Quebec—</i>																
13.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	More poor sick than paying patients.
16.....	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	
18.....						0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	Twenty per cent free
20.....	0 50	0 50	0 50	0 50	0 50	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	\$1.50 for out-of-town patients.
21.....										0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	0 50- 1 00	
22.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	"When possible."
24.....										1 00	1 00	1 00	1 00	1 00	1 00	Number of patients treated gratis from March, 1909, to July, 1914, 1,153 = 26,220 days; number treated at reduced rates, in same period, 797 = 16,835 days.
26.....						1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	
27.....										0 50	0 50	0 50	0 50	0 50	0 50	
28.....	0 25	0 25	0 25	0 25	0 25	0 25	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 40	



TABLE 1A.—PUBLIC WARD PATIENTS—TARIFF PER DIEM.—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Ontario—</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	
30.....	0 36	0 36	0 36	0 36	0 36	0 36	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	Per week.
31.....	2 50— 3 50	3 50	3 50	3 50	3 50	3 50	3 50	3 50	3 50	4 90	4 90	4 90	4 90	4 90	4 90	Per week.
32.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	0 72	Per week.
33.....	2 00	2 00	2 00	2 50	2 50	2 50	3 00	3 00	3 00	3 00	3 00	4 00	4 00	4 00	4 00	Per week.
34.....	0 40	0 40	0 40	0 40	0 40	0 40	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	0 70	Many free.
35.....	0 33	0 33	0 33	0 33	0 33	0 33	0 33	0 33	0 33	0 35	0 35	0 50	0 50	0 50	0 50	Many free.
36.....	0 65	0 65	0 65	0 65	0 65	0 65	0 65	0 65	0 65	0 70	0 70	0 65	0 65	0 65	0 80	Many free.
37.....	.....	.....	.....	0 57	0 70	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00	1 00	1 00	Patients divided in- to free and pay pa- tients. For former municipality makes grant of \$3.50 per week for city cases, govt. \$4.90 for outside.
38.....	.....	.....	.....	.....	.....	.....	.....	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	Per week.
39.....	0 40	0 40	0 40	0 40	0 50	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 80	0 80	Many free.
40.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Per week—“mostly free.” Per week.
42.....	.....	.....	.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	Per week.
43.....	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 40	0 50	0 50	0 50	0 50	0 50	Many free.
44.....	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	Per week.
45.....	.....	.....	.....	.....	.....	.....	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	Many free.
46.....	.....	.....	.....	.....	.....	.....	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	Per week.
47.....	0 40	0 40	0 40	0 40	0 40	0 40	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	Many free.
48.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	1 00	1 00	1 00	1 00	Per week.
49.....	0 50	0 50	0 50	0 50	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	1 00	1 00	1 00	Many free.
50.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Per week.
51.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	1 00	1 25	1 25	1 25	Many free.
52.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	Per week.
53.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	0 70	Many free.
54.....	0 40	0 40	0 40	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00	Per week.
55.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Many free.
57.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Per week.
59.....	0 40	0 40	0 40	0 40	0 45	0 45	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 80	0 80	Per week—“mostly free.” Per week.
60.....	0 35	0 35	0 35	0 35	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 80	0 80	Per week.
61.....	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	Per week.
62.....	2 00	2 00	2 00	2 00	3 50	3 50	3 50	3 50	4 90	4 90	4 90	4 90	4 90	5 60	7 00	Per week.





TABLE II.—SEMI-PRIVATE WARD PATIENTS—TARIFF PER DIEM.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Maritime Provinces—</i>															
2.....					0 86	0 86	0 86	0 86	0 86	0 86	0 86	0 86	0 86	1 15	1 15
3.....				0 75	0 75	0 75	0 75	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 70
4.....	0 71	0 71	0 71	0 71	0 71	0 71	1 14	1 14	1 14	1 14	1 75	1 75	1 75	1 50	1 50
6.....										1 42	1 42	1 42	1 42	1 42	1 75
7.....	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 30	1 70	1 70
10.....					1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
11.....							1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
<i>Quebec—</i>															
15.....										2 00	2 00	2 00	2 00	2 00	2 00
16.....	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	2 00	2 00
17.....	0 50	0 50	0 50	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	1 00	1 00	1 00	1 00
18.....					1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 50	1 50
19.....	0 25	0 25	0 25	0 25	0 25	0 25	0 25	0 25	0 25	0 75	0 75	0 75	0 75	0 75	0 75
21.....										1 50	1 50	1 50	1 50	1 50	1 50
22.....							1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50
23.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	1 0	0 50	0 50	0 50	0 50	0 50
24.....										1 50	1 50	1 50	1 50	1 50	1 50
25.....										1 50	1 50	1 50	1 50	2 00	2 00
26.....						1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50
27.....										1 50	1 50	1 50	1 50	1 50	1 50
28.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 75	0 75	0 75	0 75	0 75
<i>Ontario—</i>															
30.....	0 50	0 50	0 50	0 50	0 50	0 50	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
31.....	0 85	0 85	0 85	0 85	0 85	0 85	1 50	1 50	1 50	1 50	1 50	1 50	1 75	1 75	1 75
31*.....	7 00	7 00	7 00	7 00	7 00	7 00	7 00	7 00	7 00	8 00	8 00	8 00	8 00	8 00	8 00
32.....	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00	1 00	1 00	1 00
33.....	3 00	3 00	3 00	4 00	4 00	4 00	4 00	4 00	4 00	4 00	4 00	4 90	4 90	4 90	7 00
34.....	4 50	4 50	4 50	4 50	4 50	5 00	5 00	5 00	5 00	7 00	7 00	7 00	7 00	7 00	7 00
35.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 50	10 00	10 00	10 00	10 00	10 00	10 00
36.....					0 71	0 71	0 71	0 71	0 71	0 71	0 71	0 71	0 71	0 85	1 50

\*Per week.

TABLE II.—SEMI-PRIVATE WARD PATIENTS—TARIFF PER DIEM—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Ontario.</i>															
37.....															
38.....	0 40	0 40	0 40	1 00	1 00	1 00	1 00	1 00	1 00	1 45	1 71	1 71	1 71	1 71	1 71
41*				0 40	0 50	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	1 00
42.....				1 43	1 43	1 43	1 43	1 43	1 43	1 43	1 43	1 43	1 43	1 43	1 43
43*															
44.....	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	1 00	1 00	1 00	1 00	1 00
45.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 25	1 25	1 25	1 25	1 25
46.....	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00	1 00	1 00
47.....				1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
48.....	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 75	0 70	0 70	1 00	1 00	1 00
49.....	0 50	0 50	0 50	0 50	0 50	0 50	0 50	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00
50.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 50
51.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 15	1 42	1 43	1 43	1 43	1 65	1 65	1 65
52.....	0 75	0 75	0 75	0 75	0 75	0 75	0 75	1 00	1 00	1 00	1 00	1 00	1 42	1 42	1 42
53*	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	7 00	7 00	7 00	7 00	7 00
54.....	8 00	8 00	8 00	8 00	8 00	8 00	8 00	8 00	8 00	8 00	9 00	9 00	9 00	9 00	9 00
55.....	1 00	1 00	1 00	1 25	1 25	1 50	1 50	1 50	1 50	1 50	1 75	1 75	1 75	1 75	1 75
56.....											1 15	1 15	1 15	1 15	1 15
57.....															
58.....	0 85	0 85	0 85	0 95	1 00	1 00	1 00	1 00	1 25	1 25	1 25	1 25	1 45	1 45	1 45
59.....	1 00	1 00	1 00	1 00	1 42	1 42	1 42	1 70	1 85	2 14	2 14	2 28	2 28	2 28	2 28
60.....	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	0 70	1 00	1 00	1 00	1 00
61.....	5 00	5 00	5 95	5 95	7 00	7 00	7 00	7 00	8 25	8 75	8 75	10 50	10 50	10 50	10 50
62*	1 00	1 00	1 00	1 00	1 00	1 25	1 25	1 25	1 25	1 25	1 50	1 50	1 50	1 50	1 50
64.....	0 71	0 71	0 71	0 71	0 85	0 85	0 85	0 85	1 14	1 14	1 28	1 28	1 28	1 28	1 42
65.....									0 75	0 75	1 00	1 00	1 00	1 00	1 00
66.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
68.....	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00
69*	1 25	1 25	1 25	1 25	1 25	1 25	1 25	1 25	1 50	1 50	1 50	1 50	1 50	1 50	2 00
70.....				5 00	5 00	5 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00	6 00
71.....															
72.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	2 00	2 00	2 00
73.....	1 00	1 00	1 00	1 00	1 15	1 15	1 15	1 45	1 45	1 45	1 45	1 45	1 45	1 45	1 45
74*	1 45	1 45	1 45	1 45	1 70	1 70	1 70	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15
75.....	10 00	10 00	10 00	10 00	10 00	10 00	12 00	12 00	12 00	12 00	12 00	12 00	12 00	12 00	12 50
76.....	0 70	0 70	0 70	0 70	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 50
77.....	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 50	1 50	1 50	1 50	1 50	2 50	2 50	2 50







27.....	1 00	1 00	1 00	1 00	1 25	1 25	1 25	1 50-	1 50-	1 50-	1 50-	1 50-
28.....	17 35-	17 35-	21 00-	21 00-	21 00-	21 00-	21 00-	2 00	2 00	2 00	2 00	2 00
29*.....	26 00-	26 00-	30 00-	30 00-	30 00-	30 00-	30 00-	1 50	1 50	1 50	1 50	1 50
	52 00	52 00	60 00	60 00	60 00	60 00	60 00	21 00-	21 00-	21 00-	21 00-	21 00-
								30 00-	30 00-	30 00-	30 00-	30 00-
								60 00	60 00	60 00	60 00	60 00
Ontario—												
30.....	1 25-	1 25-	1 25-	1 25-	1 25-	1 85-	1 85-	1 85-	1 85-	1 85-	1 85-	1 85-
	2 00	2 00	2 00	2 00	2 00	2 50	2 50	3 00	3 00	3 00	3 00	3 00
31†.....	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-	10 00-
	12 00	12 00	12 00	12 00	12 00	12 00	12 00	14 00	14 00	14 00	14 00	14 00
32.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50-	1 50-	1 50-	1 50-	1 50-
								1 75	1 75	1 75	1 75	1 75
33†.....	5 00-	5 00-	5 00-	5 00-	5 00-	6 00-	6 00-	8 75-	8 75-	8 75-	8 75-	8 75-
	8 00	8 00	10 00	10 00	10 00	10 00	10 00	14 00	14 00	14 00	14 00	14 00
34*.....	5 00-	5 00-	5 00-	5 00-	5 00-	8 00-	8 00-	10 00-	10 00-	10 00-	10 00-	10 00-
	10 00	10 00	10 00	10 00	10 00	15 00	15 00	18 00	18 00	18 00	18 00	18 00
35.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 50	1 50	1 50
36.....						1 12-	1 14-	1 15-	1 15-	1 15-	1 15-	1 15-
						2 15	2 15	2 15	2 15	2 15	2 15	2 15
37.....						1 71	1 71	2 85	2 85	2 85	2 85	2 85
38*.....	0 75-	0 75-	1 00-	1 00-	1 00-	10 50	10 50	10 50	10 50	10 50	10 50	10 50
39.....	1 50	1 50	1 75	1 75	1 75	2 25	2 25	2 60	2 60	2 60	2 60	2 60
40*.....						8 00	8 00	8 00	8 00	8 00	8 00	8 00
41*.....												
43*.....												
44.....	1 50-	1 50-	1 50-	1 50-	1 50-							
	2 00	2 00	2 00	2 00	2 00							
45*.....	5 00-	5 00-	7 00	7 00	7 00							
	6 00	6 00										
46.....												
47.....	1 00-	1 00-	1 00-	1 00-	1 00-							
	1 75	1 75	1 75	1 75	1 75							
48.....	1 00-	1 00-	1 00-	1 00-	1 00-							
	1 75	1 75	1 75	1 75	1 75							
49.....	1 25	1 25	1 25	1 25	1 25							
50.....												
51.....	1 42	1 42	1 42	1 42	1 42							

\*Per week.  
†Per month.

TABLE III.—PRIVATE WARD PATIENTS—TARIFF PER DIEM.—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>Ontario—Continued.</i>															
52.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 50	1 50	1 75	1 75
53*	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	9 00—	9 00—	9 00—	9 00—	15 00—	11 00—
54.....	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	15 00	15 00	1 00—	1 43—	1 72—	25 00
												1 00—	2 15—	2 15—	1 72—
55.....	*8 00—	*8 00—	*8 00—	1 50—	1 50—	1 75—	1 75—	1 75—	1 75—	1 75—	2 00—	2 25—	2 50—	2 86—	2 86—
	*10 00—	*10 00—	*10 00—	1 75—	1 75—	2 00—	2 00—	2 25—	2 25—	2 25—	2 25—	2 50—	2 50—	2 75—	2 75—
	*12 00—	*12 00—	*12 00—									2 50—	2 50—	2 75—	4 00—
57.....									1 75—	1 75—	1 75—	1 75—	1 75—	2 00—	2 50—
59.....	1 50	1 60	1 60	1 70	1 85	1 85	2 00	2 00	2 25	2 25	2 25	2 25	2 25	3 00	3 00
60.....	1 80	1 80	2 10	2 10	2 10	2 42	2 85	2 85	2 85	2 85	2 85	3 57	3 57	2 40	2 40
61.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	2 00	2 00	2 00	2 00	2 00	3 57	3 57
62*	5 00—	10 00	12 25	12 25	12 25	12 25	12 25	14 00	15 75	15 75	15 75	17 50	17 50	2 00	2 00
	10 00													17 50	17 50
63*											25 00	25 00	25 00	25 00	25 00
64.....	1 50	1 50	1 50	1 50	15 0	1 50	2 00	2 00	2 00	2 50	2 50	2 50	2 50	2 50	2 50
65.....	1 00	1 00	1 00	1 00	1 14	1 14	1 14	1 42	2 00	2 00	2 00	2 00	2 00	2 50	2 50
66.....					1 00	1 00	1 25	1 50	1 50	1 00	1 50—	1 50—	1 50—	1 50—	1 50—
68.....	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50—	1 50—	1 50—	1 75	1 75	1 75	1 75	1 75
											1 50—	1 50—	1 50—	1 50—	1 50—
69*	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	2 25	2 25	2 25	2 25	2 25	2 25	2 25
	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00	7 00—	7 00—	7 00—	7 00—	7 00—	8 00—	8 00—
70.....	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	14 00	14 00	16 00	16 00	16 00
											2 00	2 00	2 00	2 00	3 00
71*				6 00—	6 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	7 00—	2 50	2 50	7 00—
				12 00	12 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00	14 00
72.....	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 50	2 50	2 50
73.....	1 00—	1 00—	1 00—	1 00—	1 15—	1 15—	1 45—	1 45—	1 45—	1 45—	1 45—	1 45—	1 45—	1 45—	1 45—
	2 15	2 15	2 15	2 15	2 85	2 85	3 60	3 60	3 60	3 60	3 60	3 60	3 60	3 60	3 60
74*	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—	15 00—
	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00
75.....	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	1 50—	2 00—	2 00—	2 00—
	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	2 50—	3 00—	3 00—	3 00—
77*										15 00	12 00	12 00	14 00	14 00	14 00





TABLE III.—PRIVATE WARD PATIENTS—TARIFF PER DIEM—Concluded.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
<i>British Columbia.</i>															
110*	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00	3 00
111	2 00	2 00	2 00	2 00	2 14	2 14	2 14	2 14	2 14	2 14	2 14	2 14	2 14	2 14	2 14
112	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50
114†	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
115	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00	20 00
116†	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
117	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42	1 42
118	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15
119	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15
120	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
125†	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00
126	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00	2 00
127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†	127†
128	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50	2 50
129†	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15
130	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15	2 15
131	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85	2 85

\*Maternity cases.

†Per week.

TABLE IV.—OPERATING ROOM CHARGES.\*

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
<i>Maritime Provinces—</i>	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
2.....					2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10	2-10
3.....						2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
4.....	3	3	3	3	3	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5
10.....						3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
<i>Quebec—</i>															
13.....	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7	2-7
16.....	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10	5-10
17.....	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
18.....															
19.....	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5	3-5
21.....															
22.....															
23.....	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7	3-7
24.....	24														
26.....															
27.....															
28.....	2	2	2	2	2	2	3	3	3	3	3-7	3-7	3-7	3-7	3-7
<i>Ontario—</i>															
30.....	3	3	3	3	3	3	5	5	5	5	5	5	5	5	5
31.....	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
32.....	3	3	3	3	3	3	3	3	3-5	3-5	3-5	3-5	3-5	3-5	3-5
33.....	2-5	2-5	2-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5	2 50-5
34.....															
35.....	2	2	2	2	2	3	3	3	3	3	3	3	3	3	3
36.....															
38.....															
39.....	2	2	2	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
41.....															
42.....															
43.....															
44.....	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2 50-10	2 50-10	2 50-10	2 50-10	2 50-10	2 50-10	2 50-10
45.....															
46.....															
47.....	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
48.....	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5	2-5
49.....	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3

\*Exclusive of Doctor's fee. Where two figures are given, the smaller is usually for minor operations and the larger for major.





HOSPITAL TARIFFS AND COSTS OF MAINTENANCE.  
TABLE V.—AVERAGE COST PER PATIENT, DAILY.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Maritime Provinces—</i>																
1.....	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	\$ cts. \$ cts.	Wages increased 50% since 1900. Flour 21%, butter 32%, oatmeal 20%, beef 40%, barley 48%, beans 66%, codfish 44%, cheese 14%, tea 30%. Hospital farm supplies of milk and vegetables since 1907 have made a saving of 5c. per patient daily.
2.....	0 32	0 33	0 33	0 40	0 40	0 40	0 41	0 39	0 40	0 37	0 40	0 40	0 45	0 40	.....	Food and fuel increased considerably last 3 years. Equipment and salaries remain about same.
3.....				1 08	1 08	1 08	1 08	1 18	1 18	1 20	1 22	1 25	1 28	1 30	1 30	Very little increase in wages. Great increase in prices of food supplies.
4.....	1 25	1 10	1 12	1 12	1 12	1 10	1 14	1 23	1 35	1 37	1 42	1 52	1 54	1 49	1 50	Food supplies, drugs, salaries and wages have all increased. Food supplies have trebled. Salaries have doubled.
5.....	0 45	0 54	0 53	0 50	0 53	0 53	0 54	0 57	0 57	0 58	0 61	0 62	0 62	0 62	.....	Increase in cost of service (nurses) excessive. In 1908 excellent nurses commanded \$25-\$30 a month; in 1914, in different ones, \$30-\$50. Laundry charges double. Charwomen and laundress wages have increased 33 1/3%. Fruit and green vegetables more easily procurable and about same price. Increased cost of food apart from milk and meat comparatively trifling.
6.....									1 50-2 00	1 50-2 00	1 50-2 00	1 50-2 00	1 75-2 50	1 50-2 00	1 50-2 00	

7.	1 04	1 13	1 14	1 44	1 24	1 36	1 38	1 45	1 57	1 47	1 50	1 55	1 60	1 65	1 65	In 12 years food stuffs have advanced considerably though not particularly so the last few. Fuel has. Salaries not to any appreciable extent. General standard of maintenance requirements higher
11.	0 99	1 02	1 30	0 96	1 29	1 39	1 23	1 50	1 68	1 80	1 64	1 51	1 61	1 61	1 61	The high cost in some years is due to extraordinary expenses for the poor. In other years there is a decrease due to many furnishings being given free.
Quebec— 12.																
16.	1 35	1 37	1 50	1 56	1 38	1 35	1 54	1 76	1 79	1 75	1 90	2 14	2 12	2 20	2 20	
17.	1 28	1 36	1 45	1 31	1 43	1 69	1 58	1 46	1 69	1 79	1 53	1 61	1 73	1 72	1 72	
18.								1 55	1 74	2 14	1 84	1 95	1 86	1 86	1 86	
19.	0 90	0 91	0 88	1 10	1 13	1 20	1 50	1 43	1 60	1 40	1 32	1 62	1 43	1 25	1 25	
20.	1 47	1 56	1 60	1 61	1 61	1 74	1 75	1 79	1 96	1 94	1 98	2 06	2 07	2 08	2 08	
21.									1 44	1 44	1 68	1 88	1 99	2 22	2 22	Increased price food stuffs. Labour and surgical supplies. Change by absorption of another institution makes comparison with previous years impossible. Increased cost of food most serious feature. Wages in general have increased 10 to 20%; but there has been no increase in salaries of nurses.
22.							1 69	1 55	1 84	1 76	1 88	1 69	1 63	1 77	1 77	Cost of food, especially vegetables and meat greatly increased.
25.											1 40	1 45	1 50	1 65	1 90	Increased cost caused by increased price of food, fuel and salaries.
26.							1 65	1 73	2 10	1 74	1 72	1 59	1 50	1 60	1 60	
27.												0 60	0 62	0 69	0 69	
28.	0 15	0 15	0 15	0 17	0 15	0 20	0 20	0 22	0 20	0 20	0 25	0 25	0 25	0 27	0 30	
29.	0 54	0 53	0 54	0 56	0 54	0 55	0 56	0 53	0 55	0 57	0 56	0 61	0 64	0 66	0 66	
Ontario— 30.	0 89	0 92	0 85	0 96	1 03	1 02	1 05	1 02	1 16	1 28	1 06	1 17	1 25	1 36	1 36	Meat, butter, eggs and fuel very high. Cost of repairs—electrical, plumbing, painting, etc., also very high.
32.	0 80	0 72	0 61	0 75	0 80	0 94	1 03	0 95	1 07	1 02	1 01	1 06	1 03	1 23	1 30	Food supplies and salaries contribute the greatest increase.
33.	0 56	0 56	0 56	0 56	0 56	0 72	0 75	0 77	0 80	0 74	0 82	0 81	1 03	1 30	1 30	



HOSPITAL TARIFFS AND COSTS OF MAINTENANCE—Continued.  
TABLE V. AVERAGE COST PER PATIENT, DAILY—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Ontario—Continued.</i>																
34.....	\$ cts. 1 00 0 77	\$ cts. 0 77 0 43	\$ cts. 0 43 0 43	\$ cts. 0 44 0 44	\$ cts. 0 49 0 49	\$ cts. 0 96 0 53	\$ cts. 0 63 0 63	\$ cts. 0 65 0 65	\$ cts. 0 68 0 68	\$ cts. 0 70 0 70	\$ cts. 1 01 0 75	\$ cts. 1 12 0 75	\$ cts. 1 15 0 88	\$ cts. 1 26 0 88	\$ cts. 0 95 0 95	Food: supplies and equipment have gone up. Also wages of maids, orderlies, engineers, etc.
35.....																Reduction in cost for 1913 due to increase in number of patients. Figures show an increase between 1909 and 1914 of 50% in price of meats, 20% in butter, 25% in eggs, slight increase in fuel. Lemons 100% increase.
37.....											1 50	1 56	1 61	1 46		Cost of provisions has increased, particularly meat, butter, eggs and sugar. Average increase of 40% in food costs, etc. from 1906 to 1914; proportion of wages to total cost of maintenance about one-third.
39.....	0 78	0 78	0 80	0 81	0 80	0 84	0 83	0 94	1 02	1 00	1 03	1 00	1 11	1 11	1 13	High cost of first three years caused by cost of furnishing, etc., though victuals were cheaper. Wages for men increased from \$15 to \$30 with board, etc., for girls \$5 to \$12 during period 1903-1914.
40.....								1 09	0 96	1 08	0 99	1 04	1 01	1 13		Meat has increased 60%, sugar 45% and other groceries proportionately. Dietary for each patient in 1904 cost 70c. per day now 95c.
42.....					1 21	2 26	1 28	0 97	0 89	0 88	1 19	1 10	1 14	0 72	1 86	Fuel, food supplies and wages have advanced 30 to 50%.
44.....	0 60	0 60	0 66	0 67	0 75	0 79	0 84	0 96	0 93	0 87	0 95	1 07	1 11	1 25		
45.....	0 83	0 49	0 57	0 59	0 59	0 55	0 70	0 65	0 70	0 68	0 65	0 68	0 87	0 89		

46.....	1 46	1 53	1 87	1 46	1 53	1 87	1 49	1 45	1 59	1 73	1 45	1 28	1 50	1 95	.....	Increased cost largely due to increase in price of food and labour. The low rate for 1911 is due to a great increase in the number of typhoid patients.
47.....	1 07	0 96	1 13	1 06	1 03	1 21	1 15	1 21	1 53	1 50	1 51	1 53	1 75	1 74	1 75	Salaries and wages have more than doubled in every class of work. Provisions about 50% higher in 1914 than in 1900. Drugs and Surgical supplies have likewise increased 50%.
48.....	0 79	0 86	0 75	0 93	0 93	1 42	1 03	0 98	1 13	1 04	1 16	1 06	1 20	1 30	1 43	Increase due in greatest measure to cost of food, fuel and wages.
49.....	0 50	0 51	0 51	0 55	0 70	0 76	0 83	0 68	0 83	0 87	0 91	0 95	0 99	0 86	1 00	Increase due to increase in cost of food supplies, equipment and help.
51.....	1 25	1 27	1 30	1 34	1 37	1 40	1 44	1 45	1 50	2 00	1 60	1 63	1 72	1 60	1 70	
52.....	0 49	0 47	0 51	0 51	0 53	0 53	0 59	0 67	0 62	0 63	0 69	0 70	0 67	0 92	.....	
57.....	.....	.....	.....	.....	.....	.....	.....	.....	1 26	1 72	0 70	1 44	1 41	1 35	1 56	
59.....	0 84	0 88	1 20	1 50	1 24	1 22	1 10	1 13	1 42	1 39	1 21	1 38	1 44	1 68	.....	Greatest increases have been in wages, meat, milk, butter and eggs. The cost per diem given does not include linen which would be about 10c. per day.
60.....	1 84	1 84	1 84	1 84	1 78	1 78	1 84	1 83	1 83	1 83	1 92	2 04	2 06	2 06	.....	
61.....	0 98	0 98	0 83	0 86	0 77	0 86	0 50	0 99	0 86	0 64	1 47	1 15	0 73	0 68	1 40	
64.....	0 64	0 64	0 64	0 60	0 60	0 81	0 65	0 85	0 96	1 00	1 02	1 01	1 01	0 85	.....	
65.....	0 71	0 71	0 71	0 71	1 75	1 75	1 75	1 57	1 83	1 83	1 87	1 87	1 87	2 23	2 23	
68.....	1 24	.....	.....	.....	1 92	1 33	1 36	1 56	1 77	1 98	1 86	1 98	1 98	1 61	.....	
69.....	.....	.....	.....	1 25	1 16	1 24	1 36	1 36	1 26	1 10	1 26	1 32	1 19	1 10	.....	
70.....	0 54	0 54	0 65	0 76	0 80	0 90	0 91	0 84	1 22	0 83	1 14	1 16	1 21	1 55	.....	
71.....	.....	.....	.....	1 20	1 16	1 05	1 07	1 29	1 16	1 16	1 33	1 25	1 41	1 58	.....	
72.....	0 11	0 20	0 22	0 20	0 90	1 08	0 85	0 81	1 05	1 14	1 06	0 96	0 80	0 97	1 10	Food supplies, fuel and wages have gone up. The treatment and care of patients have also increased in efficiency.
73.....	0 71	0 70	0 75	0 76	0 78	1 00	1 00	1 07	1 12	1 41	1 39	1 35	1 37	1 50	1 51	Food supplies generally and fuel are higher and wages accordingly, but it is impossible to state that the increased cost of maintenance is due to any one thing.
75.....	0 66	0 65	0 66	0 70	0 75	0 91	0 85	0 89	0 99	1 03	1 00	1 06	1 27	1 37	.....	
76.....	0 89	0 75	0 88	0 94	1 03	1 14	1 37	1 31	1 37	1 63	1 52	1 58	1 98	1 97	1 97	Salaries have increased 25%.
79.....	1 23	1 10	1 08	1 05	1 10	1 82	1 15	1 12	1 21	1 32	1 34	1 41	1 50	1 59	.....	Meat, butter and eggs 50%.

HOSPITAL TARIFFS AND COSTS OF MAINTENANCE—Continued.  
TABLE V.—AVERAGE COST PER PATIENT, DAILY—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Manitoba—</i>																
80.....	\$ cts. 0 93	\$ cts. 0 88	\$ cts. 1 05	\$ cts. 0 96	\$ cts. 1 06	\$ cts. 1 33	\$ cts. 1 19	\$ cts. 1 74	\$ cts. 1 33	\$ cts. 1 29	\$ cts. 1 31	\$ cts. 1 34	\$ cts. 1 31	\$ cts. 1 48	\$ cts. 1 60	Food supplies, drugs and salaries have all increased; new equipment such as X-Ray apparatus has increased maintenance account. Have better fuel rates since installation of spur track from railway 2 years ago. Will also benefit to extent of 40c. per ton by reduced freight rate.
83.....						0 88	0 75	1 25	1 25	1 28	1 69	1 47	1 40	1 35	1 50	Food and fuel greatly increased during past 2 or 3 years. Salaries and wages have somewhat increased.
85.....	1 25	1 15	1 28	1 33	1 25	1 29	1 26	1 55	1 52	1 54	1 64	1 87	2 48	2 47		
86.....	0 77	0 74	0 72	0 51	0 55	0 77	0 67	0 99	1 04	0 99	0 72	0 73	0 65	0 87		
<i>Saskatchewan—</i>																
87.....						2 11	1 98	1 94	1 98	2 04	2 01	1 98	2 14	2 10		High cost of living does not seem to have made any difference. Salaries and fuel charges more than equal provision costs and these do not seem to have varied much. The number of patients seems to have had more effect as it costs almost as much to run an empty small hospital as a full one. Increase in expenses caused largely by higher cost of food, fuel and drugs, and higher salaries required to keep efficient nurses, etc., also certain improvements installed have cost more on account of high cost of material and labour.
88.....										2 01	2 17	2 20	2 70	2 63		

89.	Expenses high first two years— as only graduate nurses kept. Training school begun 1910 with less salaries.	2 54	1 98	1 38	1 27	1 83
90.	In 1911-12 tried reduction of Public Ward rate to \$1.00 but could not stand it. Salaries remain about same; Fuel remains about same; Meat higher, other food supplies little increase.	1 73	1 63	2 17	1 86	1 76
94.	Increasing cost due (1) food supplies increasing slightly (2) Higher salaries and wages—latter due to high rent workmen have to pay. (3) Heavy item of fuel. (4) Ever-increasing demand for new and better equipment in scientific apparatus. (5) Increasing demands of patients.	1 65	1 83	1 88	2 25	2 39
94.	Since 1907 expenses have in- creased considerably owing principally to the fact that the hospital is better equip- ped..	1 00	1 00	1 00	.75	.75
98.	Drugs and equipment have advanced.	2 00	2 00	2 00	2 00	2 25
99.	Decreased cost last two years attributable to increase in number of patients and better management, though higher salaries have been paid. Food and fuel have been about stationary. Drugs have considerably increased.	2 02	1 96	2 22	1 86	1 88
100.	Increase due to high price of food and dry goods, but especially salaries and cost of labour and material for repairs.	2 00	2 00	2 00	2 09	2 10
101.	Increase due to increased cost of hospital supplies. Wages and food very high.	1 62	1 58	1 80	1 88	1 98
107.	In 1911 moved from temporary building into newly built hospital. Increase in 1914 due to renewal of insurance.	2 70	2 59	3 83	2 43	3 33

HOSPITAL TARIFFS AND COSTS OF MAINTENANCE—Continued.  
TABLE V.—AVERAGE COST PER PATIENT, DAILY.—Continued.

Reference No.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914	Remarks.
<i>Alberta—Continued.</i>																
109.....	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	Cost of supplies and salaries have increased.
<i>British Columbia—</i>																
111.....					1 63	2 58	1 93	1 51	2 54	2 03	1 85	2 38	2 67	2 45	2 22	Cost of supplies and equipment together with salaries have increased considerably.
112.....	1 25	1 25	1 25	1 25	1 25	1 25	1 40	1 40	1 40	1 40	1 40	1 50	1 50	1 50	1 60	Food supplies, fuel, drugs and salaries have increased.
115.....						2 18	4 37	2 91	1 89	1 99	2 43	2 02	2 17	1 91		This hospital was beyond railway communication until 2 years ago and was therefore handicapped by excessive freight rates.
116.....					1 78	1 65	1 53	1 52	1 55	1 65	1 78	1 82	1 88	2 07	1 95	The prior years, 1900-1904 not given.
117.....							4 13	3 47	4 84	2 70	4 52	4 88	3 72	2 95	3 95	In outlying mining district. Daily average cost varies with number of patients.
120.....	1 32	1 90	2 02	1 80	1 88	1 93	1 90	2 07	2 05	2 20	2 30	2 36	2 23	2 08		Food, fuel, salaries and equipment have not gone up to any marked degree.
126.....			0 87	0 39	0 43	0 57	0 52	0 33	0 58	0 77	1 10	0 45	0 70	0 67	0 61	Running expenses are heavy and number of patients (miners) varies greatly. Cost of fuel, food and equipment has risen steadily.
127.....										2 00	2 05	1 95	1 95	2 09		Within past year or two various supplies have advanced in price, particularly meats, milk, bread, etc. Since war was declared there has been a pronounced advance in drugs, dressings, rubber goods etc. Wages have gone up.
128.....				1 58	1 56	1 52	1 97	1 67	1 84	1 77	1 74	1 75	1 98	2 11		The increased cost in 1912-1913 is due to the increased cost of nursing and higher prices of commodities.
130.....	2 40				1 60	1 54	1 20	1 63	1 82	1 85	1 95	2 07	2 77	2 78		
131.....	1 64	1 63	1 89	1 85	1 90	1 70	1 64	1 83	1 83	1 90	1 87	2 10	1 96	1 89	2 13	

## APPENDIX No. 6.

*Exhibit contributed by the Department of Labour, Canada, through Mr. R. H. Coats.*

## RENTS.

Chapter I.—Rents in Canada, 1900-1913.

Chapter II.—Rents in Other Countries (United Kingdom, United States, Australia, New Zealand, South Africa, France, Germany, Belgium, Norway), 1900-1913.

## CHAPTER I.

## RENTS, CANADA, 1900-1913.

At least three-quarters of the salaried and wage-earning class in the modern community live in rented houses, while an equally large proportion of business premises are occupied by others than the owners.<sup>1</sup> Moreover, the incidence of family expenditure on rentals, always heavy, tends (in the light of practically every investigation into family incomes and budgets), to become relatively more burdensome the smaller the income.<sup>2</sup> For these reasons, as well as for the distinct economic considerations involved, rent occupies a very important place in any inquiry into the cost of living. Though under normal conditions rents move more slowly than prices (through force of custom, lack of standardization of properties, the comparatively long time nature of the agreement involved, etc.) there is evidence that conditions have been otherwise in this respect in Canada of late, and that in not a few localities the rise in rents has equalled the rise in the cost of foods and general commodities.

In the absence of comprehensive official statistics the problem of measuring the trend in rents is very difficult, largely because of the impossibility of standardizing rentable properties for purposes of quotation. Each store or dwelling has, as a rule, characteristics of construction and location which to a considerable extent determine its rental. Identical and immediately neighbouring properties will sometimes be found commanding different rents. Comprehensive investigation in a situation of this kind is indispensable for statistical accuracy; where only isolated and (comparatively) few facts are available, caution must be used in accepting conclusions; and this is the more necessary where direct comparison of such facts for different localities and different periods of time is desired. Even when the rent for the same property over a period of years is obtained, subsidiary data are essential for interpretation. This is particularly the case when the period has been one of rapid growth, as in most Canadian cities during the past fifteen years; for while an expansion of this kind is marked by a general increase in property valuations and rents, the effect within limited areas may be quite the opposite, as, for example, when a first-class residential district is changed into a boarding-house district by the invasion of the business section, or as when within the business section itself a different grouping of financial institutions occurs or a new

<sup>1</sup> Comprehensive statistics on tenancy in Canada are lacking, the Census dealing with the subject only in connection with farm lands. It may be noted that the report of the Assessment Commissioner of Toronto for 1913-14 records 32,184 dwellings and stores occupied by owners and 37,231 (i.e., 54 per cent of the total), occupied by tenants. For the salaried and wage-earning class alone the proportion of the latter would undoubtedly be much higher.

<sup>2</sup> By Engel's law. See Mayo-Smith, *Statistics and Economics*, Vol. II, p. 19.



shopping district is opened. In the property itself, moreover, an appreciation in the land value may have gone hand in hand with a depreciation in the value of the building.<sup>1</sup>

#### SCOPE OF PRESENT INQUIRY.

The present inquiry represents an attempt to throw light on the general tendency of rentals in Canadian cities since 1900. Four classes of property were taken as the basis of investigation, namely, (1) a typical store in a first-class business section, (2) a typical store in a second-class business section, (3) a typical down-town office, and (4) a typical six-roomed dwelling with sanitary conveniences in a working-class section. Under each of these headings information was sought in each locality throughout the Dominion having a population of 10,000 or over with regard to rentals, in the years 1900, 1905 and 1913, respectively. Application was made in each city to three representative real estate agents established in business since 1900, each being requested to take the rates from books and to cover in each case the same property in the respective years, selecting one free from abnormal features or conditions pertaining to a restricted area or class of building. Altogether returns were obtained from one or more competent authorities in 48 localities. These are given in full in Table A of this chapter, Parts I, II, III, and IV.

Supplementary to the final section of these statistics a return on house-rents based on data in the Department of Labour is published. In addition to the retail prices quoted in Chapter I, Part (2) as received from the correspondents of the Department of Labour, a monthly statement is also obtained from the same source of the predominant rental paid by the working class in the several localities for a six-roomed dwelling (a) with sanitary conveniences, and (b) without sanitary conveniences. The records in this connection are fairly complete for some fifty-five localities from the end of the year 1909 until the present. While not regarded as statistically accurate, being based on individual opinion, care is taken to insure that the opinion is formed after due inquiry, and it is thought that the record, though insufficient to measure differences between locality and locality with accuracy, may be relied upon to reflect general tendencies from year to year. With the object of enlarging and checking the statistics obtained from agents as above described, the correspondents of the *Labour Gazette* were requested to obtain data for the years 1900 and 1905 from the same sources as those from which their current information is received. Table B, Parts I and II, herewith, contains the data secured in this way, the figures showing what is regarded as common or predominant rents paid by the working classes in the years, 1900, 1905, 1912 and 1913, respectively.

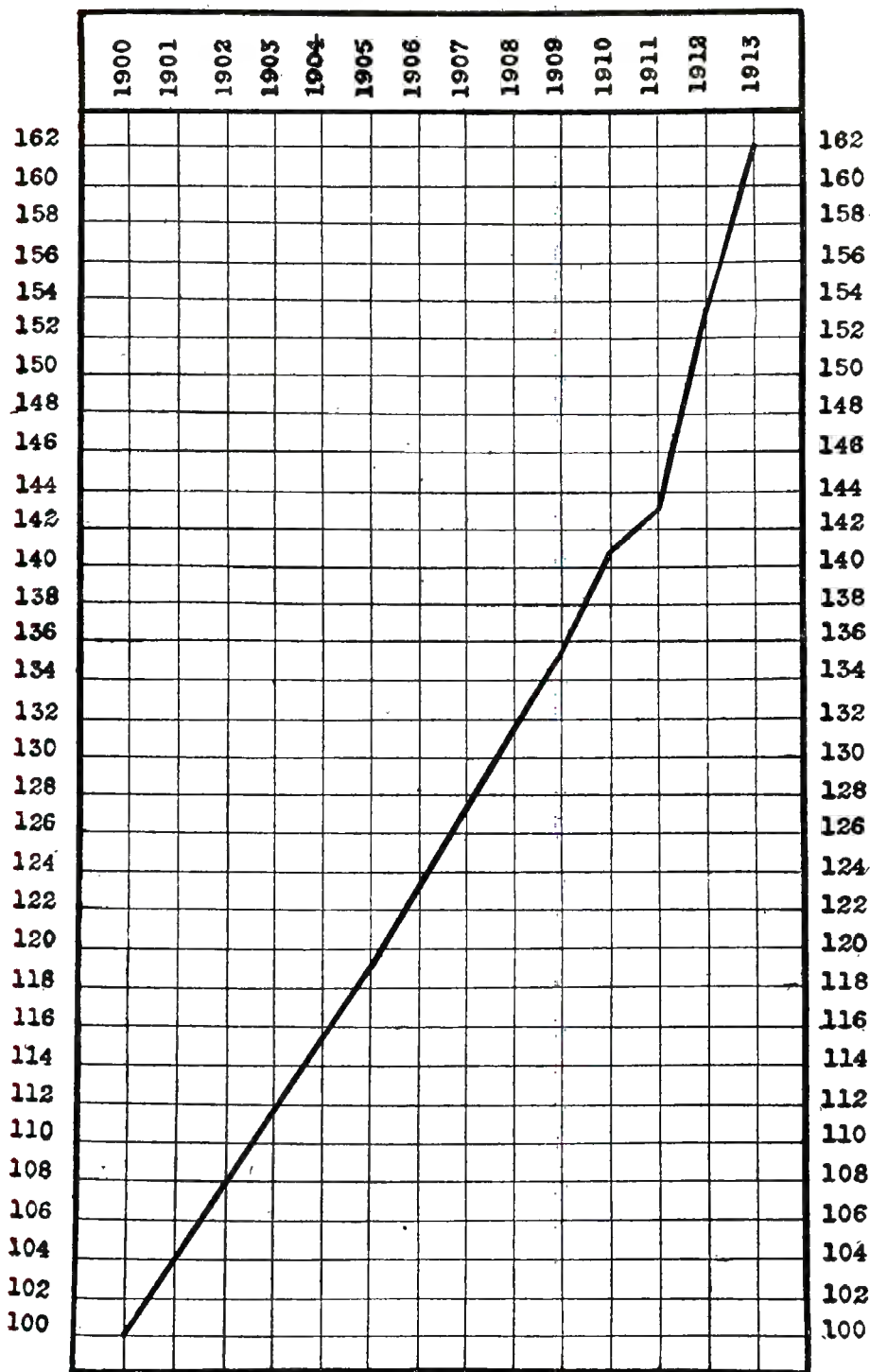
#### INDEX NUMBERS OF THE RETURNS.

In order to ascertain the general result of these estimates two series of index numbers, a weighted and an unweighted, have been constructed for each of the six sections of the inquiry as above described: (1) As the cities in the list differ greatly in size, those of lesser rank considerably outnumbering the large centres, a simple average of the returns would appear to give undue prominence to small localities. There are over a dozen towns in the table of approximately 10,000 population, each of which would be regarded in the calculation as of equal importance to Montreal, which has a population approaching half a million. The index numbers for the several localities, therefore,

<sup>1</sup> On the point of depreciation, the Massachusetts Cost of Living Commission remarks: "A new house should rent for from 10 per cent to 12 per cent gross on its cost, including the cost of the land. At first, while the house needed no repairs, this would produce a net income of from 7 per cent, to be reduced a little later, when the repair problem appears, to something like 5½ per cent, or in some cases 6½ per cent. In the long run, about 40 per cent of the gross return must be deducted for taxes, repairs, depreciation, etc. A careful analysis of data collected shows that the average owner of rented houses nets from 6 to 7 per cent on his investment, more often 6 per cent than 7 per cent."

## THE COURSE OF HOUSE RENTS, CANADA, 1900-1913.

(Rents 1900=100).



were in the first instance weighted according to population as shown by the Census of 1911.<sup>1</sup> The results by Provinces are given in Table No. 1 beginning opposite. (2) On the other hand it might be pointed out that as the inquiry did not include places of less than 10,000, the smaller towns should be given greater prominence than that based on population alone, seeing that they probably reflect conditions in a large number of the smaller communities scattered throughout the Dominion which though individually unimportant as to size in the aggregate make up a large part of the population.<sup>2</sup> Especially is this necessary owing to the fact that the greatest rapidity of growth of late has been in the large centres, producing abnormalities not to be found elsewhere. A simple unweighted average of the returns has accordingly been added in Table No. 2.

## COURSE OF PREDOMINANT RENTALS, CANADA, 1900-1905-1913.

### I.—WEIGHTED INDEX NUMBERS.

(Rentals 1900=100.)

#### (a) TYPICAL STORE IN FIRST-CLASS BUSINESS SECTION.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	141.2	189.0
Prince Edward Island.....	100.0	116.6	125.0
New Brunswick.....	100.0	105.6	185.0
Quebec.....	100.0	138.7	480.8
Ontario.....	100.0	129.9	272.3
Manitoba.....	100.0	143.4	285.6
Saskatchewan.....	100.0	166.7	361.6
Alberta.....	100.0	231.7	338.4
British Columbia.....	100.0	154.0	469.1
Dominion of Canada.....	100.0	140.0	343.6

#### (b) TYPICAL STORE IN SECOND-CLASS BUSINESS SECTION.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	119.1	160.1
Prince Edward Island.....	100.0	113.9	145.1
New Brunswick.....	100.0	104.5	185.1
Quebec.....	100.0	297.4	588.3
Ontario.....	100.0	116.1	240.9
Manitoba.....	100.0	177.6	271.4
Saskatchewan.....	100.0	164.3	302.4
Alberta.....	100.0	145.9	279.2
British Columbia.....	100.0	129.1	279.6
Dominion of Canada.....	100.0	174.6	340.6

<sup>1</sup> The weights are as follows: Sydney, 18; Westville, 4; Amherst, 9; Halifax, 46; Truro, 6; Charlottetown, 11; Moncton, 11; St. John, 42; Fredericton, 7; Quebec, 78; Three Rivers, 14; Sherbrooke, 16; Sorel, 8; St. Hyacinthe, 10; St. Johns, 6; Montreal, 466; Hull, 17; Ottawa, 86; Brockville, 9; Kingston, 18; Belleville, 10; Peterborough, 18; Orillia, 7; Toronto, 376; Niagara, 9; St. Catharines, 12; Hamilton, 81; Brantford, 23; Guelph, 15; Berlin, 15; Woodstock, 9; Stratford, 13; London, 46; St. Thomas, 14; Chatham, 10; Windsor, 17; Owen Sound, 12; Sault Ste. Marie, 10; Port Arthur, 11; Fort William, 16; Winnipeg, 135; Brandon, 14; Regina, 30; Moosejaw, 14; Medicine Hat, 5; Calgary, 44; Edmonton, 25; Lethbridge, 8; Nelson, 4; New Westminster, 13; Vancouver, 100; Victoria, 32; Nanaimo, 8.

<sup>2</sup> See statement with regard to growth of Urban population since 1901, Part II, Section (2).

## (c) TYPICAL DOWN-TOWN OFFICE.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	122.7	155.1
Prince Edward Island.....	100.0	115.0	138.8
New Brunswick.....	100.0	105.1	185.4
Quebec.....	100.0	118.2	181.0
Ontario.....	100.0	117.5	220.1
Manitoba.....	100.0	169.1	295.6
Saskatchewan.....	100.0	179.7	348.8
Alberta.....	100.0	164.1	294.6
British Columbia.....	100.0	111.9	153.4
Dominion of Canada.....	100.0	124.6	212.0

## (d) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITH SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY REAL ESTATE AGENTS.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	125.1	161.7
Prince Edward Island.....	100.0	117.9	138.5
New Brunswick.....	100.0	114.4	146.9
Quebec.....	100.0	111.9	130.5
Ontario.....	100.0	123.8	184.6
Manitoba.....	100.0	138.3	187.2
Saskatchewan.....	100.0	176.2	239.1
Alberta.....	100.0	136.2	182.0
British Columbia.....	100.0	114.9	152.4
Dominion of Canada.....	100.0	122.0	165.3

(e) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITH SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY CORRESPONDENTS OF THE *LABOUR GAZETTE*.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	108.7	155.5
Prince Edward Island.....	100.0		
New Brunswick.....	100.0	113.7	148.0
Quebec.....	100.0	116.0	135.5
Ontario.....	100.0	116.3	177.1
*Manitoba.....	100.0	129.3	210.5
†Saskatchewan.....	100.0	100.0	250.0
British Columbia.....	100.0	115.2	169.8
Alberta.....			
Dominion of Canada.....	100.0	116.5	165.3

\*Winnipeg only quoted.

†Regina only quoted.

(f) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITHOUT  
SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY  
CORRESPONDENTS OF THE *LABOUR GAZETTE*.

Locality.	1900	1905	1913
Nova Scotia.....	100.0	102.8	132.3
Prince Edward Island.....			
New Brunswick.....	100.0	114.6	140.0
Quebec.....	100.0	122.1	140.8
Ontario.....	100.0	120.6	175.5
*Saskatchewan.....	100.0	150.5	250.0
Alberta.....	100.0	113.2	196.3
British Columbia.....	100.0	121.0	171.9
Dominion of Canada.....	100.0	120.3	161.7

\*Regina only quoted.

II.—UNWEIGHTED INDEX NUMBERS.

(Rentals 1900=100.)

(a) TYPICAL STORE IN FIRST-CLASS BUSINESS SECTION.

Province.	1900	1905	1913
Nova Scotia.....	100.0	127.7	171.9
Prince Edward Island.....	100.0	116.6	125.0
New Brunswick.....	100.0	112.2	166.6
Quebec.....	100.0	126.4	236.4
Ontario.....	100.0	127.3	212.9
Manitoba.....	100.0	132.9	217.4
Saskatchewan.....	100.0	165.6	371.8
Alberta.....	100.0	155.5	405.5
British Columbia.....	100.0	113.5	335.1
Dominion of Canada.....	100.0	129.4	281.0

(b) TYPICAL STORE IN SECOND-CLASS BUSINESS SECTION.

Province.	1900	1905	1913
Nova Scotia.....	100.0	126.4	160.9
Prince Edward Island.....	100.0	113.9	145.1
New Brunswick.....	100.0	111.4	156.2
Quebec.....	100.0	156.5	259.7
Ontario.....	100.0	121.4	201.4
Manitoba.....	100.0	157.4	227.0
Saskatchewan.....	100.0	158.3	294.3
Alberta.....	100.0	139.6	327.5
British Columbia.....	100.0	103.9	254.2
Dominion of Canada.....	100.0	129.2	218.7

## (c) TYPICAL DOWN-TOWN OFFICE.

Province.	1900	1905	1913
Nova Scotia.....	100.0	120.8	146.9
Prince Edward Island.....	100.0	115.0	138.8
New Brunswick.....	100.0	110.8	165.8
Quebec.....	100.0	121.6	150.0
Ontario.....	100.0	121.6	167.4
Manitoba.....	100.0	144.5	227.1
Saskatchewan.....	100.0	182.5	362.5
Alberta.....	100.0	199.0	457.9
British Columbia.....	100.0	93.4	166.8
Dominion of Canada.....	100.0	129.5	203.8

## (d) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITH SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY REAL ESTATE AGENTS.

Province.	1900	1905	1913
Nova Scotia.....	100.0	124.3	157.4
Prince Edward Island.....	100.0	117.9	138.5
New Brunswick.....	100.0	117.3	149.3
Quebec.....	100.0	115.2	171.0
Ontario.....	100.0	117.4	163.6
Manitoba.....	100.0	136.2	178.1
Saskatchewan.....	100.0	175.0	237.5
Alberta.....	100.0	146.6	225.1
British Columbia.....	100.0	94.9	167.3
Dominion of Canada.....	100.0	121.0	170.4

(e) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITHOUT SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY CORRESPONDENTS OF THE *LABOUR GAZETTE*.

Province.	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100.0	112.3	140.0	150.0	159.7	135.6	146.9
Prince Edward Island.....	100.0	116.2	128.5	160.0	148.5	153.3	161.7
New Brunswick.....	100.0	120.4	147.4	150.7	143.0	147.7	158.6
Quebec.....	100.0	124.0	140.4	136.0	148.7	150.3	158.6
Ontario.....	100.0	150.0	158.3	158.3	122.0	153.5	165.0
Manitoba.....	100.0	108.3	158.3	158.3	122.0	153.5	165.0
Alberta.....	100.0	108.3	158.3	158.3	122.0	153.5	165.0
Saskatchewan.....	100.0	150.0	163.9	112.5	167.3	179.7	164.7
British Columbia.....	100.0	121.7	163.9	112.5	167.3	179.7	164.7
Dominion of Canada.....	100.0	120.4	144.5	138.6	145.8	154.6	160.7



(f) TYPICAL SIX-ROOMED DWELLING IN WORKINGMEN'S SECTION—WITH SANITARY CONVENIENCES—ORIGINAL STATISTICS FURNISHED BY CORRESPONDENCE OF THE *LABOUR GAZETTE*.

Province.	1900	1905	1909	1910	1911	1912	1913
Nova Scotia.....	100.0	119.5		138.4	132.6	150.2	155.0
Prince Edward Island.....							
New Brunswick.....	100.0	114.5		121.2	124.9	128.2	144.4
Quebec.....	100.0	118.5	149.3	150.0	146.7	150.8	175.2
Ontario.....	100.0	123.1	125.8	127.9	141.6	149.7	155.4
Manitoba.....	100.0	130.3	136.4	136.4	136.4	181.8	212.1
Saskatchewan.....	100.0	100.0	100.0	194.4	194.4	222.2	250.0
Alberta.....							
British Columbia.....	100.0	110.4	163.0	148.7	157.2	168.8	151.4
Dominion of Canada.....	100.0	119.0	135.4	140.7	143.2	153.7	162.0

TABLE "A".—RENTALS, CANADA, 1900, 1905, 1913.

(Returns from Real Estate Agents.)

PART I.—RENTAL OF TYPICAL STORE IN FIRST-CLASS BUSINESS SECTION.

NOVA SCOTIA.

City.	Street.	Year or Month.		
		1900	1905	1913
Amherst.....	Victoria (i).....	700 00	775 00	860 00
".....	".....	300 00	300 00	600 00
".....	".....	300 00	360 00	500 00
Halifax.....	Barrington.....	600 00	900 00	1,200 00
New Glasgow.....	Provost.....	25 00	30 00	45 00
Sydney.....	Charlotte.....	600 00	900 00	1,200 00
Truro.....	Prince.....	360 00	390 00	420 00

PRINCE EDWARD ISLAND.

Charlottetown.....	Richmond (ii).....	900 00	900 00	900 00
".....	Upper Queen.....	200 00	275 00	300 00
".....	Upper Hillsboro.....	96 00	108 00	120 00

NEW BRUNSWICK.

Fredericton.....	Queen.....	600 00	700 00	900 00
Moncton.....	Main.....	50 00	60 00	75 00
St. John.....	Prince William.....	300 00	300 00	600 00

(i) With heat.

(ii) Water rates included.

## TYPICAL STORE IN FIRST-CLASS BUSINESS SECTION—Continued.

## QUEBEC.

City.	Street.	Year or Month.		
		1900	1905	1913
Hull.....	Main.....	30 00	40 00	80 00
".....	".....	25 00	35 00	75 00
".....	".....	30 00	40 00	75 00
Montreal.....	St. Catherine West, near Uni- versity ".....	1,500 00 1,200 00	2,000 00 1,800 00	7,000 00 7,000 00
Sherbrooke.....	Wellington.....	600 00	600 00	1,000 00
Sorel.....	Augusta.....	10 00	24 00	30 00 35 00
".....	King.....	25 00	30 00	35 00
".....	".....	15 00	22 00	30 00
St. Hyacinthe.....	St. Antoine.....	900 00	950 00	1,000 00
St. Johns.....	Richelieu.....	300 00	400 00	600 00
Three Rivers.....	Forges.....	600 00	600 00	1,000 00
".....	Notre Dame.....	800 00	800 00	1,200 00

## ONTARIO.

Belleville.....	Front.....	100 00	140 00	190 00
Berlin.....	King.....	*375 00	*395 00	*625 00
".....	".....	600 00	700 00	800 00
".....	".....	600 00	750 00	1,000 00
Brantford.....	Colborne.....	600 00	750 00	1,600 00
".....	".....	600 00	720 00	970 00
".....	".....	25 00	40 00	70 00
Brockville.....	Main.....	600 00	750 00	1,000 00
Chatham.....	King.....	20 00	20 00	35 00
".....	".....	600 00	1,200 00	1,200 00
".....	".....	1,000 00	1,000 00	1,000 00
Guelph.....	Wyndham.....	*600 00	*700 00	*1,100 00
Hamilton.....	James.....	100 00	100 00	300 00
Kingston.....	Princess.....	400 00	600 00	1,000 00
".....	".....	1,000 00	1,000 00	1,000 00
London.....	Dundas.....	1,000 00	1,200 00	1,600 00
".....	".....	1,000 00	1,200 00	2,100 00
Niagara Falls.....	Erie.....	40 00	45 00	50 00
".....	Queen.....	50 00	60 00	70 00
Orillia.....	Mississippi.....	240 00	360 00	600 00
".....	".....	300 00	450 00	650 00
Ottawa.....	Sparks.....	* 600 00	900 00	3,000 00
".....	".....	75 00	.....	250 00
Owen Sound.....	Poulett.....	*50 00	60 00	75 00
".....	".....	**350 00	675 00	900 00
".....	".....	***750 00	750 00	900 00
".....	".....	***750 00	750 00	1,000 00
".....	".....	1,100 00	1,100 00	1,500 00
Peterborough.....	George.....	1,000 00	1,100 00	1,300 00
".....	".....	1,600 00	2,000 00	2,200 00
".....	".....	350 00	350 00	500 00
Sault Ste. Marie.....	".....	100 00	100 00	135 00
St. Catharine's.....	St. Paul.....	10 00	15 00	35 00
St. Thomas.....	Talbot.....	40 00	40 00	60 00
".....	".....	500 00	550 00	550 00
Stratford.....	Ontario.....	420 00	540 00	720 00
".....	".....	540 00	660 00	900 00
".....	Downie.....	600 00	600 00	900 00
".....	".....	.....	.....	1,000 00
".....	Ontario & Downie, Central.....	500 00	.....	900 00
".....	".....	700 00	.....	1,100 00

\*Tenant paying taxes.

\*Grocery Store. \*\*Boot and Shoe Store. \*\*\*Hardware Store. \*\*\*\*Dry Goods Store, tenant paying taxes.

## TYPICAL STORE IN FIRST-CLASS BUSINESS SECTION—Continued.

## ONTARIO—Continued.

City.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Toronto .....	Yonge, near Shuter .....	1,750 00	2,500 00	*5,000 00
" .....	" .....	1,000 00	1,250 00	2,500 00
Windsor .....	Aullette .....	15 00	30 00	70 00
Woodstock .....	Dundas .....	800 00	900 00	1,000 00

## MANITOBA.

Brandon .....	Ninth and Rosser .....	75 00	90 00	100 00
Winnipeg .....	Portage .....	**300 00	500 00	1,166 67
" .....	Main .....	200 00	300 00	450 00
" .....	Main, bet. Portage and McDer- mot .....	1,650 00	2,000 00	4,800 00

## SASKATCHEWAN.

Moosejaw .....	Main .....	50 00	100 00	300 00
" .....	" .....	100 00	125 00	200 00
Regina .....	Scarth .....	40 00	75 00	125 00
" .....	" .....	100 00	150 00	375 00

## ALBERTA.

Calgary .....	Main .....	150 00	200 00	350 00
Edmonton .....	Jasper Ave. ....	***75 00	150 00	300 00
" .....	" .....	***50 00	100 00	250 00
" .....	" .....	75 00	150 00	300 00
" .....	" .....	100 00	200 00	400 00
Lethbridge .....	3rd Ave. South .....	20 00	30 00	125 00
Medicine Hat .....	Toronto .....	50 00	75 00	175 00
" .....	Main .....	50 00	75 00	175 00
" .....	Toronto .....	60 00	70 00	175 00

\*Tenant paying taxes (\$900 in 1913).  
\*\*\*30x75. \*\*\*\*25x50.

\*\*This district has changed from 3rd to 1st class section.

## BRITISH COLUMBIA.

Nelson .....	Baker .....	100 00	50 00	110 00
Vancouver .....	Hastings .....	*130 00	*130 00	*500 00
" .....	" .....	**155 00	**200 00	**700 00
" .....	" West .....	*75 00	*160 00	*500 00
" .....	" .....	**100 00	**150 00	**550 00
" .....	" .....	100 00	250 00	500 00
Victoria .....	Government .....	45 00	50 00	250 00
" .....	" .....	75 00	100 00	200 00
" .....	Fort .....	45 00	55 00	150 00

\*Inside. \*\*Corner.

## PART II.—RENTAL OF TYPICAL STORE IN SECOND-CLASS BUSINESS SECTION.

## NOVA SCOTIA.

City.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Amherst.....	Victoria.....	20 00	20 00	20 00
".....	Church.....	180 00	250 00	350 00
".....	".....			400 00
".....	".....	150 00	180 00	250 00
Halifax.....	Granville.....	600 00	600 00	900 00
New Glasgow.....	Archimides.....	15 00	20 00	25 00
Sydney.....	George.....	300 00	500 00	600 00
Truro.....	Outram.....	20 00	22 50	25 00

## PRINCE EDWARD ISLAND.

Charlottetown.....		200 00	250 00	300 00
".....	Upper Great George.....	150 00	175 00	225 00
".....	Gt. George, Central.....	96 00	56 00	130 00

## NEW BRUNSWICK.

Fredericton.....	York.....	400 00	450 00	500 00
Moncton.....	St. George.....	30 00	35 00	50 00
Newcastle.....	Henry.....	150 00	175 00	200 00
St. John.....	Main.....	150 00	150 00	300 00

## QUEBEC.

Hull.....	Main.....	15 00	25 00	40 00
".....	".....	15 00	25 00	50 00
".....	".....	15 00	20 00	30 00
Montreal.....	St. Catherine, East near St. Lawrence St.....	440 00	1,450 00	2,900 00
Sherbrooke.....	King.....	10 00	10 00	20 00
".....	".....	15 00	15 00	35 00
Sorel.....	Augusta.....	6 00	12 00	22 00
".....	".....	15 00	18 00	25 00
".....	Charlotte.....	10 00	15 00	20 00
St. Hyacinthe.....	144 Cascades.....	500 00	600 00	700 00
St. Johns.....	St. James.....	150 00	200 00	200 00
Three Rivers.....	Forges.....	300 00	300 00	500 00
".....	Notre Dame.....	400 00	400 00	600 00

## ONTARIO.

Belleville.....	Campbell Bridge.....	100 00	125 00	160 00
Berlin.....	Queen.....		*225 00	516 00
".....	".....	200 00	250 00	300 00
Brantford.....	Market.....	480 00	660 00	960 00
".....	".....	13 00	13 00	25 00
".....	West End Colborne.....	15 00	15 00	30 00
".....	".....	20 00	30 00	40 00
Brookville.....	Dalhousie.....	200 00	300 00	450 00
".....	Main.....	200 00	300 00	450 00

\* Tenant paying taxes,

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## TYPICAL STORE IN SECOND-CLASS BUSINESS SECTION—Continued.

## ONTARIO—Continued.

City.	Street.	Year or Month.		
		1900.	1905.	1912.
		\$	\$	\$
Chatham.....	Thames.....	15 00	15 00	20 00
".....	King.....	300 00	500 00	500 00
".....	St. Clair..	450 00	450 00	450 00
Guelph.....	Quebec.....	*180 00	*270 00	*360 00
Hamilton.....	James.....	35 00	35 00	75 00
Kingston.....	Princess, above Montreal.....	240 00	240 00	350 00
London.....	King.....	20 00	25 00	30 00
".....	Dundas and Richmond.....	300 00	300 00	600 00
Niagara Falls.....	Park.....	20 00	22 50	25 00
".....	Erie Ave., between Park and Bridge.....	30 00	40 00	55 00
Orillia.....	Peter.....	180 00	300 00	504 00
".....	".....	200 00	300 00	480 00
Ottawa.....	Bank.....	180 00	200 00	780 00
Owen Sound.....	Tenth.....	300 00	450 00	565 00
Peterborough.....	Hunter.....	200 00	200 00	300 00
".....	Water.....	250 00	275 00	300 00
".....	".....	200 00	250 00	300 00
Sault Ste. Marie.....	".....	40 00	35 00	50 00
St. Catharines.....	Ontario.....	10 00	15 00	35 00
St. Thomas.....	Talbot.....	20 00	20 00	30 00
".....	Redan and Balaclava.....	228 00	228 00	264 00
Stratford.....	Downie, Wellington and West end of Ontario.....	240 00	300 00	360 00
	Ontario.....	400 00	540 00	600 00
	Ontario, Downie & Wellington.....	350 00	400 00	850 00
Toronto.....	Yonge, near McGill.....	360 00	390 00	700 00
".....	Queen.....	600 00	750 00	900 00
Windsor.....	Pitt.....	10 00	15 00	1,140 00
Woodstock.....	Dundas.....	500 00	600 00	1,000 00

\* Tenant paying taxes.

## MANITOBA.

Brandon.....	Sixth St. and Rosser Ave.....	75 00	100 00	125 00
Winnipeg.....	Notre Dame.....	20 00	25 00	40 00
".....	Main St South.....	50 00	85 00	175 00
".....	" " between Graham and St. Mary's.....	480 00	1,200 00	1,500 00

## SASKATCHEWAN.

Moos Jaw.....	High.....	40 00	60 00	150 00
".....	South Railway.....	75 00	100 00	125 00
Regina.....	Broad.....	30 00	60 00	100 00
".....	Tenth Ave.....	50 00	115 00	150 00
".....	".....		75 00	150 00

## ALBERTA.

Calgary.....	First St. East.....	100 00	125 00	150 00
Edmonton.....	Namayo Ave.....	25 00	50 00	125 00
".....	".....		25 00	75 00
Lethbridge.....	13th St. North.....	*	50 00	150 00
".....	First Ave. S.....	15 00	30 00	40 00
Medicine Hat.....	North Railway.....	25 00	15 00	25 00
".....	Third Ave.....	25 00	35 00	150 00
".....	".....		30 00	70 00

## TYPICAL STORE IN SECOND-CLASS BUSINESS SECTION—Continued.

## BRITISH COLUMBIA.

City.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Nelson .....	Vernon .....	**50 00	30 00	30 00
Vancouver .....	Cordova .....	60 00	60 00	150 00
" .....	" West .....	***75 00	***125 00	***150 00
" .....	" .....	****100 00	****180 00	****250 00
" .....	Pinder .....		60 00	150 00
Victoria .....	Douglas .....	25 00	25 00	200 00
" .....	Blanchard .....	25 00	30 00	75 00
" .....	Johnson .....	45 00	55 00	150 00

\* No second-class business section. \*\* Boom in progress. \*\*\* Inside store. \*\*\*\* Corner.....

## PART III.—RENTAL OF TYPICAL DOWN-TOWN OFFICE.

## NOVA SCOTIA.

City.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Amherst .....	Victoria .....	32 00	37 50	45 00
" .....	" .....	5 00	5 00	10 00
" .....	" .....	8 00	8 00	
Halifax .....	" .....	300 00	360 00	480 00
New Glasgow .....	Provost .....	8 00	10 00	12 00
Sydney .....	Charlotte .....	250 00	350 00	400 00
Truro .....	Wain .....	15 00	16 00	17 50

## PRINCE EDWARD ISLAND.

Charlottetown .....	Richmond .....	80 00	80 00	80 00
" .....	Upper Queen .....	120 00	140 00	180 00
" .....	Crafton .....	75 00	90 00	100 00

## NEW BRUNSWICK.

Fredericton .....	Queen .....	200 00	225 00	275 00
Moncton .....	Main .....	25 00	30 00	40 00
St. John .....	46 Princess .....	150 00	150 00	300 00



## TYPICAL DOWN-TOWN OFFICE—Continued.

## QUEBEC.

CITY.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Hull...		12 00	15 00	18 00
"		10 00	12 00	15 00
Montreal...	St. James (Merchants Bank Bdg.)	216 00	250 00	360 00
"	"	750 00	900 00	1,415 00
Sherbrooke...	Wellington	150 00	150 00	250 00
"		15 00	15 00	20 00
"		25 00	25 00	45 00
St. Hyacinthe...	St. Denis	200 00	300 00	500 00
St. Johns...		100 00	150 00	200 00
Sorel...		8 00	10 00	15 00
"		10 00	12 00	15 00
"		10 00	13 00	18 00
Three Rivers...		60 00	60 00	120 00
		75 00	75 00	180 00

## ONTARIO.

Belleville...		100 00	125 00	150 00
Berlin...		100 00		180 00
"	King	120 00	140 00	175 00
"	"	220 00	250 00	300 00
"	"	150 00	175 00	200 00
Brantford...	Near Market Square	300 00	360 00	540 00
"	Central in City	180 00	240 00	360 00
"		240 00	300 00	400 00
"		12 00	15 00	20 00
Brockville...		200 00	240 00	300 00
Chatham...	King	10 00	10 00	15 00
"	Second Floor, Cor. King and Fifth St.	180 00	192 00	216 00
"		15 00	15 00	15 00
Guelph...	Douglas	130 00	144 00	175 00
Hamilton...	James	25 00	25 00	50 00
Kingston...	Clarence	350 00		350 00
"		15 00		18 00
London...	Richmond	40 00	45 00	50 00
"		180 00	180 00	240 00
Niagara Falls...		12 50	15 00	18 00
"	McClure Block	14 00	17 00	22 00
Orillia...		40 00	60 00	90 00
"		60 00	75 00	100 00
Ottawa...	Sparks & Elgin (Trust Bldg.)	400 00	500 00	700 00
Peterborough...		175 00	200 00	250 00
"	Water	175 00	200 00	250 00
"		100 00	150 00	200 00
Sault Ste. Marie...		50 00	50 00	75 00
St. Catharines...		5 00	7 50	10 00
St. Thomas...		12 00	16 00	20 00
"	Talbot	180 00	180 00	216 00
Stratford...		120 00	130 00	240 00
"		180 00	240 00	360 00
"	Downie	200 00		400 00
"	" (Market place)	150 00		350 00
Toronto...	King & Toronto	* 50	* 75	* 1 50
"		* 60	* 96	* 2 00
Windsor...		10 00	12 00	15 00
Woodstock...	Near centre of city	14 00	16 00	18 00

\* Per square foot per year.

## TYPICAL DOWN-TOWN OFFICE—Continued.

## MANITOBA.

CITY.	Street.	Year or Month.		
		1900.	1905.	1913.
		\$ cts.	\$ cts.	\$ cts.
Brandon .....	Central 2-roomed suite.....	17 50	20 00	25 00
Winnipeg.....	Portage & Garry (Garry Block).	75 00	150 00	300 00
" .....	Main St., McIntyre Blk.....	546 00	1,116 00	1,609 00

## SASKATCHEWAN.

Moosejaw.....	Main St. (up-stairs).....	15 00	30 00	60 00
" .....	" .....	50 00	100 00	200 00
" .....	" .....	75 00	125 00	300 00
Regina.....	Scarth.....	20 00	30 00	60 00
" .....	Scarth St., 2nd floor, 35' x 40' ..	50 00	100 00	175 00

## ALBERTA.

Calgary. . . . .	McDougall Block.....	.....	25 00	25 00
Edmonton.....	Jasper Ave.....	5 00	20 00	35 00
" .....	" .....	10 00	25 00	40 00
" .....	" .....	8 00	15 00	35 00
" .....	" .....	10 00	20 00	40 00
" .....	" .....	20 00	35 00	75 00
Lethbridge.....	" .....	.....	180 00	210 00
" .....	Main .....	5 00	15 00	25 00
Medicine Hat.....	" .....	20 00	35 00	150 00
" .....	" .....	15 00	25 00	125 00

## BRITISH COLUMBIA.

Nelson.....	Baker & Ward.....	50 00	25 00	50 00
Vancouver.....	Hastings west .....	20 00	22 50	22 50
" .....	" .....	* 75	1 00	1 50
Victoria.....	N.W. Cor. Yates & Douglas St. (upstairs).....	55 00	55 00	200 00
" .....	" .....	15 00	20 00	30 00
" .....	Government.....	25 00	30 00	75 00

\*Per square foot per year in first class office building upstairs.

## PART IV.—RENTAL OF TYPICAL SIX-ROOMED DWELLING WITH SANITARY CONVENIENCES IN WORKINGMEN'S SECTION.

## NOVA SCOTIA.

City.	Month or Year.					
	1900.		1905.		1913.	
	\$	cts.	\$	cts.	\$	cts.
Amherst .....		9 00		11 00		10 00
" .....		12 00				18 00
" .....		15 00		15 00		20 00
" .....		9 00				12 00
Halifax (i) .....		141 00		180 00		240 00
Sydney .....		150 00		200 00		250 00
Truro .....		12 00		15 00		18 00
Westville .....		8 00		10 00		14 00

(i) Tendency regarding this class of dwelling is to run higher than figures given for 1913, due to great scarcity of dwellings. \$30 per mo. has been quoted in extreme cases.

## PRINCE EDWARD ISLAND.

Charlottetown .....	78 00	96 00	120 00
" .....	72 00	84 00	96 00
" .....	84 00	96 00	108 00

## NEW BRUNSWICK.

Fredericton .....	100 00	120 00	144 00
Moncton .....	10 00	12 00	16 00
Newcastle .....	*4 00	*6 00	*8 00
" .....	*6 00	*8 00	*10 00
" .....	7 00	10 00	12 50
St. John .....	100 00	112 00	144 00
" .....		9 00	10 00
" .....		11 00	12 00

\* Without sanitary conveniences.

## QUEBEC.

Hull .....	10 00	13 00	17 00
" .....		12 00	15 00
" .....	8 00	12 00	18 00
Montreal .....	12 00	13 00	14 00
" .....	14 00	16 00	18 00
Sherbrooke .....	5 00	5 00	10 00
" .....	10 00	10 00	20 00
Sorel .....	7 00	9 00	10 00
" .....	6 00	7 00	8 00
" .....	6 00	6 00	8 00
St. Hyacinthe .....	6 00	6 00	11 00
" .....	6 50	6 50	13 00
St. Jean .....	60 00	84 00	120 00
Three Rivers .....	100 00	100 00	120 00
" .....			180 00

## ONTARIO.

Belleville .....	8 00	12 00	16 00
Brantford .....	120 00	144 00	204 00
" .....	120 00	150 00	180 00
" .....	150 00	175 00	240 00
" .....	8 00	10 00	15 00

TYPICAL SIX-ROOMED DWELLING, WITH SANITARY CONVENIENCES, IN WORK-  
INGMEN'S SECTION—Continued.

## ONTARIO—Continued.

City.	Year or Month.		
	1900.	1905.	1913.
	\$ cts.	\$ cts.	\$ cts.
Brockville.....	10 00	11 50	13 00
Chatham.....	12 50	12 50	16 00
".....	180 00	216 00	240 00
".....	15 00	15 00	15 00
Guelph.....	11 00	13 00	15 00
Hamilton.....	15 00	15 00	25 00
Kingston.....	750 00	1,000 00	1,500 00
".....	7 50	10 00	16 00
".....	10 00	.....	14 00
London.....	14 00	15 00	16 00
".....	180 00	180 00	216 00
".....	.....	.....	240 00
Niagara Falls.....	15 00	17 00	20 00
".....	14 00	16 00	20 00
Orillia.....	6 00	7 00	12 00
".....	.....	120 00	132 00
".....	.....	144 00	168 00
Ottawa.....	150 00	170 00	225 00
Owen Sound.....	15 00	15 00	20 00
Peterborough.....	12 00	12 00	16 00
".....	.....	.....	18 00
".....	15 00	20 00	25 00
".....	12 00	13 00	16 00
Sault Ste. Marie.....	15 00	15 00	20 00
St. Catharines.....	5 00	6 00	15 00
St. Thomas.....	13 00	15 00	18 00
".....	12 00	13 00	15 00
Stratford.....	12 00	13 00	14 00
".....	16 00	18 00	22 00
".....	15 00	15 00	20 00
".....	.....	.....	30 00
".....	12 00	.....	15 00
".....	15 00	.....	25 00
Toronto.....	114 00	168 00	300 00
".....	12 00	15 00	20 00
Windsor.....	10 00	15 00	20 00
Woodstock.....	6 00	7 00	8 00

## MANITOBA.

Brandon.....	15 00	20 00	25 00
Winnipeg.....	12 00	.....	.....
".....	15 00	20 00	30 00
".....	18 00	25 00	35 00
".....	15 00	18 00	20 00

## SASKATCHEWAN.

Moosejaw.....	.....	25 00	30 00
".....	.....	30 00	35 00
Regina.....	20 00	30 00	35 00
".....	10 00	20 00	30 00

TYPICAL SIX-ROOMED DWELLING, WITH SANITARY CONVENIENCES, IN WORKINGMEN'S SECTION—*Continued.*

## ALBERTA.

City.	Year or Month.		
	1900.	1905.	1913.
	\$ cts.	\$ cts.	\$ cts.
Calgary.....	25 00	30 00	30 00
Edmonton.....	*15 00	20 00	35 00
".....	14 00	28 00	35 00
".....	*15 00	20 00	30 00
Lethbridge.....		15 00	18 00
".....		240 00	300 00
".....	*10 00	15 00	25 00
Medicine Hat.....	*10 00	*20 00	25 00
".....	*15 00	*20 00	40 00
".....			25 00
".....	*10 00	*15 00	40 00
".....			25 00
".....			35 00

\*Without modern or sanitary conveniences.

## BRITISH COLUMBIA.

Nelson.....	20 00	10 00	20 00
Vancouver.....	*12 50	*12 50	*25 00
".....	15 00	20 00	25 00
".....	15 00		25 00
Victoria.....	10 00	13 00	25 00
".....	15 00	17 00	25 00
".....	12 50	15 00	30 00

\*Central property. Assessed high for taxes, having a future value for business purposes.

## TABLE B.—RENTALS, CANADA, 1900, 1905, 1912, 1913.

*(Returns from Correspondents of the Labour Gazette.)*

## PART I.—SIX-ROOMED DWELLING IN WORKINGMEN'S DISTRICT—WITH SANITARY CONVENIENCES.

## NOVA SCOTIA.

City.	Month or Year.			
	1900.	1905.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Amherst.....	10 00	14 00	18 00	18 00
Halifax.....	13 00	13 00	15 00	20 00
Truro.....	10 00	12 00		15 00
Westville.....	12 00	15 00		
	9 00	10 00	14 00	14 00

SIX-ROOMED DWELLING IN WORKINGMEN'S DISTRICT -WITH SANITARY  
CONVENIENCES—Continued.

## PRINCE EDWARD ISLAND.

City.	Year or Month.			
	1900.	1905.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Charlottetown.....			8 50	6 00 8 00

## NEW BRUNSWICK.

Fredericton .....	9 00	10 00	11 00	12 00
Moncton .....	10 00	12 00	15 00	15 00
Newcastle.....				12 50
St. John.....	8 00	9 00	9 00	12 00

## QUEBEC.

Hull .....			15 00	17 00
Montreal .....	12 00	13 00	16 00	14 00
	14 00	16 00		18 00
Quebec.....	8 00	12 00	16 00	16 00
	10 00	15 00	18 00	18 00
Sherbrooke .....			12 00	12 00
			15 00	16 00
Sorel.....	7 50	8 00		13 00
	6 00	6 00	9 00	11 00
St. Hyacinthe.....	6 50	6 50	10 00	13 00
	6 00	8 00	10 00	14 00
St. Johns.....	8 00	10 00	12 00	16 00
Three Rivers.....	7 50	9 00	10 00	12 00

## ONTARIO.

Belleville .....	10 00	12 00		12 00
		15 00		15 00
Berlin.....			15 00	16 00
Brantford.....	10 00	14 00	13 00	13 00
			15 00	15 00
Brockville.....	5 00	10 00	12 00	13 00
Chatham.....	12 00	12 00	15 00	15 00
			18 00	18 00
Cobalt .....			25 00	25 00
Guelph .....	9 00	10 00	13 00	13 00
Hamilton.....	10 00	10 00	18 00	18 00
Kingston .....			13 00	13 00
	9 00	10 00	12 00	13 00
London.....	13 00	15 00	16 00	16 00
			10 00	12 00
Niagara Falls.....			15 00	18 00
		10 00	12 50	11 00
Orillia .....		12 00	15 00	14 00
Ottawa.....	12 00		15 00	22 00
			12 00	12 00
Owen Sound.....			13 00	
Peterborough.....	10 00	12 00	14 00	15 00
			18 00	20 00
Port Arthur and Fort William.....			25 00	25 00
Sault Ste. Marie.....			25 00	18 00



## ONTARIO—Continued.

City.	Year or Month.			
	1900.	1905.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
St. Catharines .....			14 00	16 00
St. Thomas.....	10 00	10 00	12 00	14 00
	12 00	12 00	14 00	22 00
Stratford.....	8 00	12 00	14 00	14 00
	12 00	14 00	18 00	18 00
Toronto.....	12 00	14 00	23 00	23 00
	14 00	16 00	26 00	27 00
Windsor.....	10 00	15 00	15 00	20 00
Woodstock.....	10 00	11 00	12 00	12 00

## MANITOBA.

Brandon.....			25 00—	20 00—
".....			30 00	30 00
Winnipeg.....	15 00—	18 00—	30 00	35 00
".....	18 00	25 00		

## SASKATCHEWAN.

Moosejaw.....			30 00	30 00
Prince Albert.....			35 00	30 00—
".....				35 00
Regina.....	18 00	18 00	40 00	45 00
Saskatoon.....			45 00	35 00

## ALBERTA.

Calgary.....			25 00—	35 00—
".....			30 00	50 00
Edmonton.....		25 00	35 00	35 00
Lethbridge.....			20 00	16 00—
".....				25 00
Medicine Hat.....			25 00	25 00

## BRITISH COLUMBIA.

Nanaimo.....			15 00—	15 00—
".....			20 00	20 00
Nelson.....	20 00	15 00	20 00—	20 00
".....			25 00	
New Westminster.....	15 00	20 00	25 00	22 00
Vancouver.....	12 00—	14 00—	25 00—	20 00—
".....	15 00	16 00	30 00	25 00
Victoria.....	12 00—	15 00—	25 00—	25 00—
".....	15 00	18 00	27 00	27 00

## PART II.—SIX-ROOMED DWELLING IN WORKINGMEN'S DISTRICT—WITHOUT SANITARY CONVENIENCES.

(Returns from Correspondents of the Labour Gazette.)

## NOVA SCOTIA.

City.	Year or Month.			
	1900.	1905.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
Amherst .....	6 00	8 00	9 00	9 00
Halifax .....	9 00—	9 00—	10 00	12 00—
" .....	11 00	11 00	.....	15 00
Sydney .....	6 00—	.....	9 00	9 00
" .....	10 00	.....	.....	.....
Truro .....	6 00	8 00—	.....	11 00
" .....	8 00	10 00	.....	.....
Westville .....	5 00	5 00	9 00	9 00

## PRINCE EDWARD ISLAND.

Charlottetown .....	.....	.....	5 00	5 00—
" .....	.....	.....	.....	7 00

## NEW BRUNSWICK.

Fredericton .....	5 00	6 00	8 00	8 00
Moncton .....	7 00	8 00	12 00	12 00
Newcastle .....	.....	.....	.....	8 00—
" .....	.....	.....	.....	10 00
St. John .....	7 00	8 00	8 00	9 00

## QUEBEC.

Hull .....	.....	.....	10 00	15 00
Montreal .....	8 00—	10 00—	12 00—	12 00—
" .....	10 00	12 00	13 00	13 00
Sherbrooke .....	.....	.....	8 00	10 00
" .....	.....	.....	11 00	14 00
Sorel .....	5 00	6 00	8 00	6 00
St. Hyacinthe .....	5 00	5 00	7 00—	9 00—
" .....	.....	.....	8 00	10 00
St. Johns .....	4 00—	6 00—	8 00—	8 00
" .....	6 00	8 00	9 00	12 00
Three Rivers .....	5 00	6 00	6 00	8 00

## ONTARIO.

Belleville .....	8 00	9 00—	9 00	10 00—
Berlin .....	.....	12 00	.....	12 00
Brantford .....	8 00	10 00	11 00	11 00
Brockville .....	8 00	7 00	9 00	10 00
Chatham .....	7 00—	7 00—	10 00—	10 00—
" .....	10 00	10 00	12 00	12 00
Cobalt .....	.....	.....	15 00	15 00
Guelph .....	6 00	7 50	10 00	10 00
Hamilton .....	8 00	8 00	14 00	14 00
Kingston .....	4 00—	6 00—	10 00—	10 00—
" .....	6 00	8 00	12 00	12 00

SIX-ROOMED DWELLING IN WORKINGMEN'S DISTRICT—WITHOUT SANITARY  
CONVENIENCES—*Continued.*ONTARIO—*Continued.*

City.	Month or Year.			
	1900.	1905.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
London.....	6 00—	8 00—	9 00—	9 00—
Niagara Falls.....	9 00—	12 00—	12 00—	12 00—
Orillia.....	6 00—	8 00—	8 00—	10 00—
Owen Sound.....	8 00—	10 00—	10 00—	12 00—
Peterborough.....	8 00—	9 00—	12 00—	8 00—
Port Arthur and Fort William.....		12 00—	9 00—	10 00—
Sault Ste. Marie.....			15 00—	12 00—
St. Catharines.....				15 00—
St. Thomas.....	8 00—	8 00—	22 00—	16 00—
Stratford.....	6 00—	8 00—	14 00—	14 00—
Toronto.....	8 00—	10 00—	8 00—	8 00—
Windsor.....	10 00—	12 00—	10 00—	12 00—
Woodstock.....	12 00—	14 00—	20 00—	20 00—
	5 00—	10 00—		21 00—
	7 00—	7 00—	12 00—	15 00—
			8 00—	8 00—

## MANITOBA.

Brandon.....			15 00—	15 00—
".....			20 00—	20 00—
Winnipeg.....			18 00—	20 00—

## SASKATCHEWAN.

Moosejaw.....			20 00—	20 00—
Prince Albert.....			20 00—	15 00—
Regina.....	10 00—	15 00—	20 00—	20 00—
Saskatoon.....			25 00—	25 00—
			35 00—	25 00—

## ALBERTA.

Calgary.....				15 00—
Edmonton.....	12 00—	15 00—	25 00—	25 00—
Lethbridge.....	10 00—	10 00—	10 00—	30 00—
Medicine Hat.....	18 00—	18 00—	14 00—	10 00—
		12 00—	20 00—	12 00—
				20 00—

## BRITISH COLUMBIA.

Nanaimo.....	8 00—	8 00—	12 00—	12 00—
".....	12 00—	15 00—	20 00—	20 00—
Nelson.....	15 00—	10 00—	15 00—	15 00—
New Westminster.....	6 50—	10 00—	18 00—	15 00—
Vancouver.....	10 00—	12 00—	20 00—	17 00—
".....	12 00—	14 00—		20 00—

## THE GENERAL RESULT.

While, as already stated, the situation with regard to rentals is one that differs, sometimes very sharply, between city and city, some interesting general tendencies are revealed in the accompanying tables. It will be seen at once that down-town business properties show the most rapid advance of all. It is apparently safe to say as a generalization that the rent of stores in the first-class business sections of the larger Canadian cities has gone up by nearly three times, while store rents in second-class sections have advanced nearly as much, and down-town office rents have doubled. At the same time house rents for the great mass of the people have advanced by 60 or 70 per cent.<sup>1</sup>

These conclusions must, of course, be taken with due regard to the data on which they are based. The advance in centrally-situated business properties has been most conspicuous in the large centres of population like Montreal, Ottawa, Toronto, Hamilton, Winnipeg and Vancouver, where rentals have in cases trebled and even quadrupled within the fourteen-year period. The fact that the weighted index number, which gives these large centres an influence proportionate to their population, rises considerably higher than the unweighted number, which averages all 48 localities as of equal importance, confirms this. On the other hand the unweighted index number for a six-roomed workingman's dwelling is slightly higher than the weighted number, showing that in house rents the small cities have probably gone up as fast as the large. Other things being equal, the western cities show the most considerable advance, and the Maritime provinces and Quebec (outside of Montreal) the least, though it should be remembered that the exceptionally rapid growth of certain western municipalities, some of which were either small villages or practically non-existent in 1900, renders the record abnormal.<sup>2</sup> In only one town on the list, namely, Nelson, are rents lower in 1913 than in 1900, the latter figures reflecting a local land boom which subsided in subsequent years. More detailed analyses of the figures follow:

*Store and Office Rents.*—The increase in down-town rents above mentioned reflects the enormous increase in land valuations which has taken place in the business sections of the large Canadian cities since 1900, due to growth and consequent speculation.<sup>3</sup> Great as the rise in rents for this class of property has been, it has not in many cases equalled the rise in valuations, and represents a decrease in the per cent earning capacity of the property. It may be pointed out, however, that rent-increases on properties of this class may not directly or immediately affect the cost of living (through increased prices of goods to offset the advance in rent costs) seeing that if based on population increases they represent a corresponding increase in the volume of business and earning capacity. Moreover, stores in such localities tend to be

<sup>1</sup> Comparing these figures with commodity prices, it would seem that they bear out, in so far as Canada is concerned, and so far as they go, the belief that rent of land has in recent years been gaining an increasing proportion of the dividend of world-wealth.

<sup>2</sup> Saskatoon, for example, was practically unoccupied in 1900, was a small village in 1905, but in 1911-13 had become a city.

<sup>3</sup> The abnormal proportions attained by land speculation in an era of rapid growth and developments (particularly in the way of opening up new areas) like that through which Canada has passed since 1900, is, of course, a familiar spectacle. No direct measurement of its increase in volume is possible from existing statistics, but it may be noted that the number of real estate agents doing business in the cities of Halifax, St. John, Montreal, Ottawa, Toronto, London, Winnipeg, Regina, Calgary, Edmonton, Vancouver and Victoria, increased from 500 in 1904 to 4,250 in 1913, or over eight times. Speaking generally, land speculation in cities has been keenest in central business properties and in vacant building lots, and less in built-on residential properties. In the case of the latter, the value of the house is an important element; in down-town properties this is less the case, even when the buildings are of an expensive character. The extent to which the amount of vacant building lots for residences has been increased by the subdividing of nearby farm property is, of course, well known.

The relation of land speculation and the growth of cities to rents is difficult to establish. Even where the population is able to find an outlet in the outskirts of the cities, the expense and inconvenience of transportation often operates in the same manner as an increase in rents. In some localities this process, by encroaching upon areas devoted to market gardening, has caused a marked lessening in the supply of produce from nearby sources.

restricted to the sale of high class goods and luxuries or to small wares like haberdashery and drugs which depend to a large extent on chance sales and high rates of profit. Rent in such localities is based to a large extent on window space for purposes of display. It is significant that grocery stores have disappeared from many central streets in recent years. The rents of the second-class of store, however, namely in second-class down-town localities, represent advances in overhead charges that to a great extent are paid by the consumer. Here the high rate of increase shown by the weighted number (over 300 per cent) is due to the fact that the return from Montreal (the heaviest weight on the list) is for a section (St. Lawrence Main) which has advanced with extreme rapidity. Omitting this, or taking the unweighted number as guide, it is apparently safe to say that the ordinary shop-rent paid by the retailer engaged in supplying families (omitting the corner grocer of residential districts) has doubled since 1900, and that this represents a change which the dealer must recoup from his customers, except to the extent that increased volume of business may have enabled him to lessen running expenses. Similarly the typical down-town office of the professional man has approximately doubled its rent since 1900. This again is largely a reflection of the rapid advance in centrally located real estate in our larger centres, combined with the fact that office rents in small localities were very low a few years ago.

*House-rents.*—From the cost of living standpoint, the most important of the returns are those referring to housing accommodation. The rent which the average mechanic now pays for a typical six-roomed house is shown as 60 to 70 per cent higher than it was in 1900. It is worthy of note that though the individual returns obtained from the two sources above mentioned on this point, namely, real estate agents and correspondents to the *Labour Gazette*, differ in individual localities, the general tendency which they reveal over the whole Dominion works out at exactly the same. This is in the case of houses with sanitary conveniences. Houses without sanitary conveniences have not advanced quite so rapidly, this being due to the fact that such dwellings are in process of disappearance in the larger centres. There has been no doubt a gradual improvement in the conveniences demanded of rented dwellings, and perhaps some allowance for this as well as for the circumstances of rapid growth in the west already mentioned, should be made, though in the larger centres increased congestion and overcrowding has appeared, and the working population now lives in flats to an extent previously unknown.

As to the circumstances accompanying and explaining the rise in house rents, frequent mention has been made of the following:—

1. The enhanced cost of building, due to
  - a. The rise in prices of materials.
  - b. The rise in the wages of building mechanics.
  - c. The increasing stringency of building and sanitary regulations.
2. Increasing taxation, due to the extensive scale of local improvements.
3. The demand for additional conveniences.
4. The enhanced demand, due to increase in population.
5. Speculation in vacant suburban properties.

[With regard to the increase in building costs: By reference to Appendix II, it will be seen that since 1900 lumber at wholesale has gone up 55 per cent, bricks over 80 per cent, and paint 15 per cent. At the same time the wages of labour in the building trades, as shown in Appendix 7, have advanced approximately 50 per cent. It should be borne in mind, however, that cost of construction has a bearing on house rents only when there is a local demand for additional housing accommodation. Where population is stagnant or declining, an advance in building costs alone is not likely to be reflected in house rents. But when, as in many Canadian cities during the past decade,



there has been rapid growth in population (following upon industrial expansion and heavy immigration) and a stimulated demand for dwellings—so much so that at times acute scarcity, especially of the four to eight-room type of dwelling, has prevailed—rents will be directly influenced by the cost of building. The rise in materials and labour will then accrue directly to the landlord and become an earning element apart altogether from his original outlay. Even at such times, however, other and more powerful factors than the cost of production will tend to enhance rents, namely, the speculative ground value which at times of expansion is peculiarly liable to inflation on the basis, largely psychological, of discounting the future. Thus during 1913 rents have fallen in certain localities as a result of the check to speculation, though building materials and labour, and the prices at which contractors are undertaking new work, are as high as ever.

Reference to the influence of speculation in building lots has already been made (footnote 3, page 479). The demand for additional conveniences which has undoubtedly been a factor in raising the cost of a certain type of dwelling has gone hand in hand with the tendency among the lowest wage-earners towards greater congestion and a lower grade of accommodation.

## NOTES ON LOCAL CONDITIONS.

As already pointed out, the figures do not render close comparisons possible as between place and place. They have been collected by several hands and they are from a limited number of sources. Moreover, statistical comparisons are difficult in a country so large and varied as Canada, where the climate ranges from the rigours of Northern Ontario and the Prairies to the mildness of the Pacific slope, with corresponding differences in the housing requirements of the people. The unequal economic development also creates differences that are difficult to gauge by statistics: in a new town,—of which several examples are included in the tables—the housing accommodation is usually of a higher standard than in the old-established city.

With a view to assisting in the comparison of local conditions, the subjoined descriptive notes, based for the most part on comments by the persons supplying the figures, are given. Some rough general conclusions may be arrived at from these notes taken in conjunction with the figures. It would seem that the Dominion falls broadly into five sections from the standpoint of the present general level of working-class rents: (1) The maritime provinces, where a typical house would appear to be \$15 a month; (2) Quebec (outside of Montreal) where the typical rent may be set down as slightly less, say, \$14 a month; (3) Montreal and Ontario, where it rises to about \$18; (4) The Prairie Provinces, where it reaches \$27.50; and (5) British Columbia, where it falls to \$23 or \$24. Taking the cities one by one, the following table may be regarded as a personal judgment of comparative conditions at the close of 1913 (Toronto being made equal 100):

City.	No.	City.	No.	City.	No.	City.	No.
Sydney.....	85	St. Hyacinthe.....	55	Brantford.....	80	Winnipeg.....	120
Westville.....	60	St. John (Que.).....	45	Guelph.....	65	Brandon.....	105
Amherst.....	75	Montreal.....	95	Berlin.....	75	Regina.....	130
Halifax.....	80	Hull.....	75	Woodstock.....	35	Moosejaw.....	130
Truro.....	70	Ottawa.....	85	Stratford.....	75	Saskatoon.....	130
Charlottetown.....	40	Brockville.....	55	London.....	80	Medicine Hat.....	135
Moncton.....	70	Kingston.....	65	St. Thomas.....	75	Calgary.....	110
St. John.....	50	Belleville.....	70	Chatham.....	75	Edmonton.....	140
Fredericton.....	50	Peterborough.....	85	Windsor.....	85	Lethbridge.....	90
Newcastle.....	45	Orillia.....	55	Owen Sound.....	85	Nelson.....	85
Quebec.....	80	Toronto.....	100	Sault Ste. Marie.....	85	Vancouver.....	95
Three Rivers.....	55	Niagara Falls.....	90	Port Arthur and	100	Victoria.....	105
Sherbrooke.....	80	St. Catharine.....	70	Fort William.....			
Sorel.....	45	Hamilton.....	95				



## NOVA SCOTIA.

*Amherst.*—The town has about doubled in population and has added many industries during the past fifteen years. There has been a re-arrangement of the business and residential sections. Taxes have increased considerably. Rents have gone up about one-third. Houses are in 1913 more plentiful than during the last three years, especially those of the poorer classes. Some landlords are reducing rent on account of business depression.

*Halifax.*—Though the increase in population has not been rapid, the amount of building has been insufficient, and housing has been scarce during the past few years. The situation is rendered acute by the demolition of an entire residential district to make room for railway terminals and industrial expansion. Rents have advanced 40-50 per cent in ten years. Houses now building will relieve the difficulty somewhat, but are too high in price for mechanics. There is need of housing at moderate rentals for workingmen, of whom the majority are now paying proportionally excessive rents.

*Truro.*—Houses are much scarcer than ten years ago. The expansion of the business section has led to changes in the residential districts. Rents have gone up about 65 per cent during the past fifteen years. Houses which in 1900 rented at \$8 now bring \$15 to \$16, but in the interval have been improved by the addition of sanitary and heating accommodation. The main cause of the local increase in rents is inadequacy in the supply of dwellings with modern conveniences for which there has been a great enlargement in the demand.

*Sydney.*—A large fire occurred in 1902, and houses have been remodelled or rebuilt since. The supply has been insufficient, especially in the case of workingmen's houses—a larger number of business men's houses appears to have been built. Houses erected for the working class during the past year have been less expensive, tending to lower rents. The increase in rents since 1902 amounts to about 25 per cent. There is not much building under way at present.

*Westville, Stellarton, New Glasgow and Trenton.*—These towns are situated within a radius of five miles and are served by electric tramways, making it possible for business people to live in any one of the towns and work in any other. Many workmen, therefore, own their own homes. In Westville and Stellarton, the coal companies own a large number of houses which they rent to employees at \$2 to \$7 per month, a rate which has remained constant for many years. Those at \$7 are comfortable six-roomed houses, but without sanitary conveniences. During the past few years large numbers of "modern" houses have been erected, renting from \$14 to \$25 a month and in good demand at that price. The erection of workingmen's houses kept pace with requirements until the opening of the Eastern Car Company's works at Trenton in 1912, when all kinds of buildings had to be used for dwellings and hundreds of new houses were put up. The depression has lessened demand and little building is being done this year. During the last two years rents (store rents particularly) rose rapidly on account of the industrial expansion. The rise during the past decade has been about 40 per cent, but returns on money invested have not kept pace, as the cost of land and building material has gone up correspondingly.

## PRINCE EDWARD ISLAND.

*Charlottetown.*—At present it is impossible to get a small cottage or tenement, but rents remain steady, there having been little or no increase during the past ten years. The population of the city has been stationary. Lumber and building materials, however, have increased, insurance is higher, and taxes 50 per cent higher.

## NEW BRUNSWICK.

*Fredericton.*—The housing problem is acute. Building has not kept pace with requirements, and for the past year hardly an unoccupied house could be found. Rentals have steadily advanced and are now 75 per cent higher than in 1900. The value of tenement property has correspondingly increased, and is still going up. Building, it is stated, costs double in comparison with ten years ago, and rentals are based accordingly. Few care to build under present conditions, and landlords take full advantage of the situation. A large block of workmen's houses is needed.

*Moncton.*—A large proportion of local wage-earners own their homes which are as a rule built of wood. There are practically no unoccupied houses at present. In 1900 there were many. A five-roomed house, with water, in the latter year rented at \$5 to \$8 per month and a nine-roomed cottage having all sanitary conveniences at from \$12 to \$14. No material change occurred till 1907, when the new Government Railway shops were erected and the building of the National Transcontinental Railway begun, causing an increased demand for houses and advancing rents. House construction since then has been at the rate of fifty yearly, but the supply is still insufficient to meet demands. Five-roomed houses are now \$12 to \$14; and nine-roomed, \$18 to 22. Construction of late years has been limited to the latter class.

*Newcastle.*—House rents about doubled in the period 1900-13, while business rents went up about 25 per cent. A five-roomed house without conveniences, formerly \$4 to \$6, now rents at \$8 to \$10; houses with conveniences, formerly \$7, now \$12.50.

*St. John.*—Since 1900, a better class of houses has been erected, but up-to-date tenements for working people have become scarce, and some are compelled to live in apartments that are not sanitary. Since the extension of the street railway many dwellings have been erected in the suburbs. Rents have increased 50 to 60 per cent, and in some cases 100 per cent. Flats formerly rented for \$7 to 8 now bring \$9, \$10 and \$12, and even \$13 to \$15. About two years ago the Board of Health compelled the installation of sanitary conveniences and rents immediately advanced, but tenants were unable to better themselves. The prospective opening of a sugar refinery at Courtenay Bay will make the housing problem still harder to cope with. High rates of taxation militate against mechanics or labouring men owning their homes. Real estate agents' figures show an increase of 100 per cent in first and second class business properties and offices, and of 40 per cent in workingmen's houses since 1900.

## QUEBEC.

*Hull.*—The demand for houses has been greater than the supply for the past six or seven years. After the great fire of 1900, ground rents were increased about 50 per cent, and thus eventually caused low house rents. From 1904 to 1907 a crisis existed and rents were very low, with the supply of houses greater than the demand. After 1907, rents increased materially in Ottawa; this drove the people back to Hull and raised the rents there. The increase in the decade has been about 50 per cent and the tendency is still upward.

*Montreal.*—Housing conditions have degenerated and there is a decided lack of workingmen's dwellings with proper conveniences at low rentals. Rents have increased 50 per cent in the last seven years, leading to "doubling up" of families in same apartment or house, overcrowding and ill health. Present rentals for workingmen range from \$7 to \$18, averaging \$10. City assessments have increased considerably since 1900.

*Quebec City.*—Rents up to 1900 averaged \$1.50 per room for a three- to six-roomed house. The tendency has been upward owing to inadequate supply. Municipal taxes

have increased. In 1912 the basis of assessment was changed from rental to real values, but no decrease in rents occurred. A rent of \$3 per room is now the average, an advance since 1900 of 100 per cent. From \$9 to \$10 is paid for a three-roomed tenement, and \$16 to \$18 for six rooms. In good localities a rent of \$20 is paid for a six-roomed house.

*Sherbrooke.*—Rents have increased 50 to 75 per cent in the last decade. A house formerly \$12 now rents at \$21. Houses in residential sections are scarce. Some tenements are now going up for working men. The increase in population from 13,000 to 20,000 is due to the establishment of additional manufacturing plants. The chief growth has been in the south and west quarters, where working men live close to their work. A scheme to assist workmen and clerks to build or own their homes would be of help. Workingmen's houses, stores and dwellings have improved 100 per cent in conveniences since 1908.

*Sorel.*—Since 1900 rents have been on the increase in the south and Richelieu district. Houses formerly \$6 are now \$7 to \$8; formerly \$10, are now \$11 to \$12, in well-to-do sections. The growth of the city has been slow.

*St. Hyacinthe.*—Since 1900 there has been a steady upward trend in rents amounting to 40 to 60 per cent according to locality. In spite of the recent depression the new rates have remained steady. Dwellings were very scarce in the years 1903-6-7-9 and 1910 owing to new industries starting, such as the Ames-Holden Co., the Canadian Organ Co., the Grothe Cigar Co., the Duhamel Chair Co., the Langevin Biscuit Co., etc. Building has been on a large scale in the past ten years, but not sufficiently to supply the demand except in 1911 and 1912. A portion of the city burnt in 1903 is not yet fully rebuilt. The tendency to higher rents is diminishing owing to the financial depression.

*St. Jean.*—Rents have doubled since 1900 owing to the increase in population and the scarcity of houses. A population of 4,000 in 1900 increased to one of 7,500 in 1913. The houses constructed during the past ten years are more sanitary. The increased price of material and labour is said to have helped to advance rentals.

*Three Rivers.*—Since the great fire in 1908 rentals have been higher, but the houses are better. An increase of 66½ per cent has occurred in business rentals. A typical six-roomed workman's house with conveniences has increased materially since 1909.

#### ONTARIO.

*Belleville.*—Rents have nearly doubled since 1904, an eight to ten dollar house of that year renting at fifteen to eighteen dollars in 1913. There have been some slight decreases lately. A year or two ago considerable demand was created by the movement of Grand Trunk Railway employees here, but there is no scarcity at present. Data supplied by the City Assessor show an increase since 1900 of ninety per cent in first-class business rentals, sixty per cent in second-class, fifty per cent in down-town offices, and one hundred per cent in workingmen's six-roomed houses. Rents were considered too low in 1900; even at present the return is low at the prevailing cost of building.

*Berlin.*—Rents have doubled in the past decade. Houses formerly renting at \$6 to \$7 are now \$12 to \$16. For three years past it has been difficult to secure a house at a rent within the workingman's means except by "doubling up." The town is noted for the number of workingmen who own their homes. The supply of houses for renting is chronically short of the demand. Instances have occurred of workmen leaving because unable to secure a suitable house, foreigners taking their places in the factories, and living twenty to forty persons to a house where only six or eight Canadians would find accommodation. A proposition to build one hundred houses a year by a Housing Com-



pany for sale at a six per cent return on investment fell through. Houses now being built are too dear—\$16 to \$22 per month. Nearly all houses in Berlin are of brick, few of frame. There is no exclusive residential section.

*Brantford.*—Rents have increased thirty per cent in the decade, owing to inadequate supply, advances in cost of building material and labour, city improvements and the general increase in cost that takes place in times of either apparent or real "prosperity." The quality of houses built recently for workingmen has improved, and sanitary conveniences are now more general. Factories are not grouped in any one section of the city, and house building, therefore, is fairly equal in all directions. The increase in the number of houses was normal up to 1910, when scarcity caused a building boom which reached the top in 1912. There are no vacant stores at present. Further increases are looked for unless more building occurs.

*Brockville.*—Rents are up 40 to 50 per cent. A six-roomed house ten years ago rented for \$9 to \$10; now for \$14. The tendency is upward. Houses have been scarce for four or five years. Improvement of houses by new plumbing, sanitary conveniences etc., is one cause of the increase in rents. There has also been an increase of two mills in the 1914 tax rate. Permanent pavements, better street lighting and other local improvements also tend to increases. A number of up-to-date dwellings are being erected.

*Chatham.*—Rents have increased 15 per cent for houses with conveniences, and 10 per cent for those without. There is a keen demand for the former which cost about \$1,500 with all sanitary improvements. There is a movement towards steam-heated flats; fifteen years ago not more than a dozen families were so housed. Urgent need exists for ten to twelve dollars a month houses, as wages do not warrant higher rents, but capital is shy of building tenements owing to high taxation. A real estate boom last year caused continual moving of tenants and many bought homes. There is no workingman's quarter. Only within the last few years have large factories been established. There are few foreigners. The city covers a comparatively large area.

*Cobalt.*—Workingmen live in two or three small sub-divisions of the town, also at North Cobalt and Haileybury, which are connected by electric railway. Houses with modern conveniences are scarce in all three towns. Miners live on the outskirts of the town, chiefly in shells of houses of three to five rooms without conveniences. Some mining companies are housing their employees in well-built dwellings on the property rented at moderate rates.

*Guelph.*—There has been a general rise in rents during the decade, amounting to about 25 per cent. At no time has the housing problem been acute. During the past five years there has been a demand from workingmen for houses at \$10 to \$12 which is their limit, but a new building by-law makes it difficult to erect a six-roomed house with modern conveniences to rent for less than \$18 to \$20. Consequently there has been a tendency for the labouring class to move to outlying portions of the city and to build cheap houses without sanitary conveniences. In the past few years Guelph has progressed greatly as a manufacturing centre. It is now feeling the financial stringency, though considerable building is still going on. Rents are now stationary.

*Hamilton.*—The housing question has been serious for working people during the past few years owing to the many new industries locating here and the great expansion of older concerns. The working population has largely increased without corresponding increase in the number of houses. Workingmen's rents have almost doubled in the past ten years. The sharp advance in real estate has made it impossible for workingmen to buy houses, and they have been forced out to the cheaper outlying districts with street railway communication. Apartment houses a few years ago were unknown; they are now going up in large numbers, but the rentals are still too high for working-

men. Owing to the prevailing trade depression many mechanics have left town and there are now more houses available, though no noticeable reduction has occurred in rents.

*Kingston.*—Workingmen's houses, formerly \$6 to \$12, are now \$12 to \$15. In the residential part of the city rents run \$15 to \$30. An experiment in erecting rows of houses at \$12 to \$15 failed, half standing empty, though three-roomed one-story cottages in the same locality, renting at \$8 to \$10, are well filled, and more are being put up. A cause cited for the increase is the heavier taxation for local improvements, such as concrete sidewalks, gas, water and street paving, "white-way" lighting, etc. On one street rents are a third higher on the south side than on the north. The south and west sides of the city are building up, and factories are being built in the lower end of the city; houses must follow. Taking into consideration the number of empty houses and the number being erected, the advance of house rents is difficult to explain.

*London.*—Rents have increased 50 per cent in the last ten years and are still going up, following taxes and assessments. An outstanding feature of the last four years is the scarcity of workmen's houses of six to eight rooms to rent at \$10 to \$15 a month. The dwellings being erected now have modern conveniences, and rent at from \$17 to \$25, a rent which is a heavy burden for workmen of moderate earnings. Building has no more than kept pace with the demand and empty houses are scarce. A company is building workmen's houses at rentals of \$9 to \$14 in Chelsea Green, a suburb; these are mostly rented by the McClary Manufacturing Company's employees. The McCormick Biscuit Company are to build one hundred new workingmen's houses in connection with their new factory—to be sold to the employees. The city in 1913 annexed a large district on the line of the inter-switching Grand Trunk and Canadian Pacific railways, with a fixed rate of fifteen mills for fifteen years. Already several manufacturing concerns have built there, and workmen's homes are being erected nearby.

*Niagara Falls.*—A continuous increase, amounting to about 50 per cent in twelve years, has occurred in rents. The city's industrial development has been rapid and the increased rents are attributed to the influx of workingmen. Workingmen now demand a better type of house and modern improvements, whereas formerly inferior houses were easily rentable. Building has been active during the whole period and the supply of houses fairly equal to demand. There has been no "house famine." Many new suburban districts are now well built up and are growing rapidly. Business sections are steadily expanding, and encroaching somewhat on residential streets. Transportation facilities have followed the movement to newer sub-divisions. A one-story cottage of five rooms with improvements, near the factory district, rents for \$17.

*Orillia.*—Population increased 2,000 between 1909 and 1913, during which time 500 houses were erected. The supply, however, is still somewhat scarce, and rents have increased 35-40 per cent. New houses are of good class, with a tendency to crowd closer on smaller lots, particularly in the older sections as a result of the rapid advance in land values. Financial stringency affected industry early in 1913, but forty or fifty houses then under way were completed, relieving the scarcity. In 1914 a downward tendency of rents was noted.

*Owen Sound.*—Up to three years ago a decided scarcity of houses prevailed, but the removal of the Canadian Pacific Railway to Port McNicoll, with some factory slackness, has now left at least 75 houses vacant. These are either at high prices or are in other ways undesirable. From 1900 to 1911 rents rose 20 to 25 per cent, but the tendency is downward now, and some houses are offered on the scale of 1900. The town has a high proportion of brick, cement and stone houses with few frame or rough-cast, and none of the latter being built.

*Ottawa.*—Rents have increased 30 per cent in the past ten years. Land values, assessments, tax rates, cost of building (labour and material) have all advanced about

35 per cent. A steady increase in population demands more housing accommodation. The extension of the business districts has in some sections largely advanced prices of residential property. Rents of business property to-day even at the higher rate bring only 4 per cent on the investment as against 6 or 7 per cent a few years ago. Values and rents are thought likely to remain steady. A large number of apartments have been built or re-arranged from other buildings. A tendency to overcrowding in "foreigners'" districts is noted.

*Peterborough.*—House rents within a mile of the centre of the city have increased 50 per cent, in the outskirts 25 per cent. In the business section the rise is not so great. There are plenty of good houses with sanitary conveniences and furnaces, but a lack of six-roomed houses without conveniences. The city has grown most rapidly to the south owing to the establishment of factories and the opportunity for cheaper land and lower taxes. It is in this section that workingmen are building houses. The east side lacks transportation and rents are lower. In the north—the older section—rents are not so high, but the houses are not modern. In the west, growth is slow, lots much higher priced and the houses of a better class. No scarcity of houses has prevailed for the past three years. Before that it was difficult to find one empty.

*Port Arthur and Fort William.*—The rise in rents during the last ten years has amounted to from 35 to 50 per cent. Houses have been very scarce at intervals. Cottage building the last two years has fairly equalized the demand though the supply has not been over-run. Rents, therefore, are firm. Some change from residential to business or industrial uses is expected in the near future in certain sections. At present the residential section is constantly growing, especially between the two cities where two hundred cottages have been built and a school opened. The feature noticeable: (1) A large increase in land values due to speculation and high rates of interest on loans for building purposes; (2) an extension of transportation facilities whereby workingmen are enabled to get out to less costly districts. Ten years ago, land being cheap, nearly every one owned his shack or house. Six years ago six-roomed houses without sanitary convenience rented at \$10; to-day they command \$15 to \$20.

*Sault Ste. Marie.*—Rents up to 1905 were about the same as in 1900, but a boom in real estate in 1911, 1912 and 1913 caused advances all round. Conditions are stationary at present.

*St. Catharines.*—Population increased by 8,000 during the past ten years, but the supply of houses has latterly kept pace with the demand. Rents, however, increased by at least 20 per cent. Many new streets have been opened.

*Stratford.*—A considerable increase in rents has occurred since 1900; houses formerly \$8 are now \$12, formerly \$14 now \$20. The last three years has seen a growing scarcity, met to a certain extent by the erection of workingmen's houses to sell at \$1,500 to \$2,000 in easy instalments. The supply of houses at \$10 to \$15 is below the demand. Manufacturers have gone into house building to keep labour convenient to factory, and there is a noticeable movement of population towards such districts. The general tendency is towards the improvement of houses, but considerable crowding (former lawns used as building sites) is noticed owing to the increased local improvement taxes. A new regulation requires a uniform distance from street lines and 35 feet minimum frontage. Real estate agents say business rentals tend to increase.

*St. Thomas.*—Rents increased 30 per cent on the average, but 40 per cent in some cases. Houses with modern conveniences have been scarce the past three years. There is a steady demand for this class. Supply and demand have been about equal 1906 to 1910. Previous to that houses were plentiful, but the demand then was not so insistent for modern conveniences. Business and industrial expansion has encroached upon residential sections. Development in the south has been due to industries established there during recent years, viz., Pere Marquette shops, Brush and Broom Factory,



Packing Company, Dehydrating Company and Stave Company. A section formerly owned by the Michigan Central Railway Company has been sub-divided and is selling to railway employees. Homes are chiefly of pressed brick, costing \$1,800 to \$4,000. Real estate is gradually increasing in value.

*Toronto.*—The advance in rents has been rapid for the last five or six years. Houses eight or nine years ago renting at \$12 to \$15 now command \$20 to \$22, seven or eight-roomed houses with modern conveniences bring \$26 to \$30. Housing for some time past has been a serious problem. The Medical Health Officer estimates a shortage of 10,000 houses. In the city hall district, 1,275 families live in four rooms, 348 in three rooms, 227 in two rooms, 139 in one room, and 61 in basements. The scarcity most pressingly affects the working classes, inducing "doubling up" to save rent and resulting lodging house and tenement house problems. Districts formerly residential are now manufacturing, and many fine houses have become lodging houses. A large number of apartment houses of modern type have been built of late. Annexation of new territory to the city has furnished an outlet from older parts. The extension of transportation facilities (strongly opposed by apartment house owners and builders) has materially helped to relieve down-town congestion.

*Windsor.*—A great increase in rents since 1900 is reported. Houses formerly \$5 are now \$15 to \$20; formerly \$10 to \$12 now \$20 to \$30. No house to-day is obtainable at less than \$15. Scarcity has prevailed for three years. Most of the houses being erected are put up by real estate dealers for sale (only about one per cent for renting). The quality, therefore, is only fair—principally frame with cement block foundation—profit being the chief consideration.

*Woodstock.*—The increase in rents amounts to about 20 per cent. The growth of the town has been so gradual that no housing problem exists, notwithstanding a considerable demand for the past two or three years. There has been some improvement in the quality of houses, the average being very good.

#### MANITOBA.

*Brandon.*—Houses were uniformly plentiful except in the years 1906 and 1912. Many apartment blocks have been built recently. Most business men and workmen are owners of their homes—even 90 per cent of foreigners own their home, a shanty or cottage with 100 to 200 feet of garden. Speculative building all is in the direction of smaller houses; five to six-roomed bungalows or cottages, costing less for upkeep, heating, etc., rent for the same as a larger house (\$20, \$25 a month) and are in greater demand.

*Winnipeg.*—Rents are up 75 per cent in some localities. The erection of 70 apartment blocks in 1912 abated the scarcity existing throughout the previous decade, but rentals have not come down. In 1905, when the scarcity caused by the increase in population was acute, rents advanced rapidly. A social survey in 1912 showed the average rent in the "foreign district" as \$3.71 per room per house. Overcrowding was found prevalent, many families living and sleeping in one room. The high cost of building and of lots make it almost impossible for workingmen to own their homes. The City Planning Commission has exhibited plans of four semi-detached model houses, and has drawn up comprehensive plans for extensions in order to avoid the mistakes of older cities. Real estate agents say it is difficult on account of the change in business locations to give fair comparisons; for instance, Portage Avenue was a third-class business section in 1900, but is now the best in the city. From 1900-13, Winnipeg's population almost quadrupled—1900, 50,000; 1905, 78,300; 1913, 184,700, and great changes have occurred in the character of building and of civic services.

## SASKATCHEWAN.

*Moosejaw.*—In 1900 the population was 1,500, the people living in houses grouped around the Canadian Pacific railway depot. In 1904, population was 3,500; water, electric light and sewerage systems were installed, and rents advanced \$5 to \$10 a month. After 1906 a steady growth set in with fairly sufficient building. In 1908 new residential sections were opened up and building became very active, continuing so in 1911, 1912 and the early part of 1913. The class of houses improved. Up to 1912 the rise in rents continued. \$30 per month being the present fair rate of a six-roomed modern house. Rents are now steady and the supply of houses sufficient. The present population is 27,000, with about 6,000 houses.

*Prince Albert.*—In 1911 and 1912 the abnormal increase in population forced the housing problem upon municipal consideration. Prior to this there had been sufficient accommodation, and the houses generally were owned by their occupants. Rents were very low compared with the present. With the increased demand in 1911, rents advanced greatly. Apartment blocks, terraces, etc., were rushed up and speedily occupied. High land values have compelled owners to maintain high rents, though there has been a downward tendency of late. People of small means have been forced out to cheaper sites.

*Regina.*—Rents have about doubled in ten years, but the class of house is now better. Local improvements, such as water, light, paved roads and sidewalks, have become available during the past five years. A scarcity of houses was noticeable the last six years. The growth of the city has caused the business section to encroach on the residential. Rents have not increased during the past year and are expected to remain stationary.

*Saskatoon.*—A heavy influx of people in 1909 to 1911 caused the demand for houses to exceed the supply, and the land values to rise sharply. Since then increasing taxation and financial stress have sent rents down more quickly than property values, though the latter have fallen considerably. Owing to excessive rents during the period mentioned the number of boarding houses increased very rapidly. The marketing of 25-foot lots tended towards congestion, and slum conditions developed amongst the foreigners. Conditions are better now.

## ALBERTA.

*Calgary.*—From 1900 to 1905, six-roomed houses rented at \$20 to \$25, and cottages of 4 and 5 rooms at from \$15 to \$20. After 1905 population increased very rapidly and the demand for workingmen's houses sent rents up 35 to 40 per cent. Central two-roomed flats rented for \$25; in suburbs for \$15 to \$20. Rents reached the top in 1911 and 1912. 1913 showed a slight decrease and less demand. In 1914 six-roomed modern houses ranged from \$20 to \$35 according to location. There is a large number of empty houses and little building in progress. The growth of the city has compelled workingmen to move out to unimproved districts where taxes are less and rents cheaper.

*Edmonton.*—The rapid growth of the city has been a factor in increasing rents, which are 75 per cent higher than ten years ago. Comparison of rents at present time and ten years ago is difficult. In ten years, population increased from 7,000 to 72,000 and the demand for medium-sized modern houses has been greater than the supply. In 1911 houses became very scarce; this was relieved in 1912 by the erection of some 1,400 houses. The residential districts have been constantly changing and business blocks are now to be found on lots formerly considered desirable residential property.

*Lethbridge.*—The demand for good houses has fallen off and there are many empty. The progress of the town was slow up to five years ago, when a sewerage system was

installed. The people then left their old houses and occupied new ones which commanded \$5 to \$7 per month more in the case of a six to eight-roomed house. The settlement of farmers in the district helped somewhat to build up the town. At present the chief building going on is in North Lethbridge near the coal mines. Reductions in rents have occurred during the past six months.

*Medicine Hat.*—Medicine Hat was a village in 1900, with 1,100 population, and the houses were without sanitary conveniences. A five-roomed cottage then rented for \$10; now with sanitary conveniences it commands \$25 per month. The sewerage system was installed five or six years ago.

#### BRITISH COLUMBIA.

*Nanaimo.*—Rents are up 50 per cent in the last ten years. Up to 1908, houses were plentiful and cheap, but an inflow of population filled all available houses and rents increased. In 1910 and 1911 houses were scarce. Workingmen, however, began to buy lots and build, bringing demand and supply closer. At present there is no scarcity of houses to let. There has been a marked change for the better in the style of houses. Rents are somewhat lower now than in 1913. Most of the business men are the owners of their premises. The sewerage system is not yet complete and sanitary conveniences in houses are only in course of installation.

*Prince Rupert.*—Good houses are always difficult to obtain and are readily rented. The only empties are small houses put up in the pioneer stage and without modern conveniences. Accommodation is being provided by the creation of apartment and rooming houses. Cottages or houses have practically all been built for owners, few for speculation.

*Vancouver.*—Rents have risen 40 per cent in the last ten years. During that time there have been two depressions; the first dating from the end of 1907 and continuing for two years with gradual improvement; the second commencing, so far as rents are concerned, in 1912, and now serious. During the first depression rents dropped 10 to 15 per cent with much house and business property to let. During last 18 months, the decrease has been 20 per cent on office, business and house property vacant. During the period between these two depressions house and business property was in demand and building was insufficient to meet requirements. The growth of the city and the rise in land values has pushed the residential section further out. Only rooming and apartment houses are now within walking distance of business centres. The latter class of house has increased last five years very rapidly owing to the large numbers of young unmarried people and the growth of the hotel habit.

*Victoria.*—During 1905 to 1913, house rents increased 30 per cent. In 1908 to 1912 great scarcity of houses prevailed. Real estate boomed, houses changing ownership in some cases two or three times in a month at increasing prices. Tenants were obliged to pay \$30 to \$35 for houses formerly \$18 to \$20. They then sub-let rooms, etc., to make up their increased rent. During the latter half of 1913 financial depression caused a marked decline in the demand for houses, rents declining \$5 or more on \$30 houses. At the end of the year 200 to 300 houses were vacant, chiefly in the older part of the town or on the outskirts. Six or seven years ago there were no apartment houses; there are now about 30 in the best sections of the city, with rents \$40 to \$60 for four to five-roomed suites. Two or three years ago these apartment buildings were fully occupied; now nearly all have vacancies. Growth of city advanced price of central lots. Most houses built during the last five years are within a two to four-mile radius of the business section, all being of the better class, detached on a lot of 30 to 60 feet frontage. Mechanics own their own homes to a considerable extent in Victoria.

## CHAPTER II.

## RENTS IN OTHER COUNTRIES., 1900-1913.

Official statistics of rents in other countries are limited. Some notes on recent conditions in the United Kingdom, the United States, Australia, New Zealand and South Africa, and, in a briefer way, in France, Germany, Belgium and Norway, follow.

Historically, the notes show that Australia, New Zealand and South Africa have experienced more or less rapid advances, the rise since 1900 being set down at 40 per cent in the first-mentioned and at 20 per cent in the second—both considerably less than the Canadian advance. The United States has also seen a rise in rents, but a generalization is impossible. In Great Britain, on the other hand, conditions have been stationary, and in France only a slight rise has apparently taken place.

As to the relative present level of rents, the comparative studies of the United Kingdom Board of Trade in 1905-1909 showed that, taking the United Kingdom as 100, the other countries stood as follows: France, 98; Germany, 123; Belgium, 74; and the United States, 209. More recently the South African Economic Commission published the following tables of comparison in this respect:—

*Index Numbers of Working Class Rents.*

Johannesburg.. . . .	100
South Africa.. . . .	80
United States of America.. . . .	47
Australia.. . . .	46
New Zealand.. . . .	46
Canada.. . . .	45
Germany.. . . .	28
England.. . . .	23
France.. . . .	22
Belgium.. . . .	17

## THE UNITED KINGDOM.

The special investigation of the United Kingdom Board of Trade in 1912,<sup>1</sup> which covered 88 important localities, shows that between 1905 and 1912 rents were on the whole practically stationary. The simple average of per cent changes in the eighty-eight towns shows an increase of 1.8 per cent. If, instead of taking the simple mean of all the changes, due regard is had to the population of the towns, a decrease of 0.3 per cent is shown. An increase was recorded in forty-five towns, a decrease in twenty-six towns and no change in seventeen towns. The extreme changes were an advance of 18 per cent at Coventry and a decline of 10 per cent at Burton-on-Trent.

In London rents fell by about 4 per cent. London, however, is still much higher than any town in the United Kingdom as the following table shows:—

## MEAN OF PREDOMINANT WEEKLY RENTALS, UNITED KINGDOM, 1912.

Number of Rooms.	87 Provincial Towns.		London.		Excess of London Rents.
	s.	d.	s.	d.	p. c.
Three rooms.. . . .	4	4½	7	3	66
Four rooms.. . . .	5	1½	8	9	71
Five rooms.. . . .	6	0	10	9	79
Six rooms.. . . .	7	4½	12	6	69

<sup>1</sup> Cost of Living of the Working Classes (Cd. 6955). The records of rentals were obtained from house agents. The change in each case is in the rent charged for the house.



Outside of London, "of the dwellings most commonly occupied by the working classes one type is prevalent, with few exceptions, in all the towns of England and Wales. This is a small self-contained four or five-roomed cottage containing a front parlour, a kitchen, a scullery, and two or three bedrooms." In Scotland, the typical residence of the working class family is "a flat of two or three rooms in a stone-built tenement-block, two, three or four stories high." Ireland is in general similar to England, "the self-contained cottage, containing two, three four or five rooms, being the rule."

An analysis of changes in the average assessment of London houses assessed at less than £40 per annum, by Mrs. Frances Wood, B.Sc.<sup>1</sup> shows a slight upward movement. A most pronounced rise is shown in rates. The opinion is expressed that with a falling demand for houses of late, landlords have probably had to bear the increase in rates themselves without making any corresponding increase in rents. On the whole, rentals in London, according to Mrs. Wood's investigation, would appear to be firm or possibly slightly upward in tendency since 1900—a conclusion, it will be noted, which is at variance with that of the Board of Trade.

#### THE UNITED STATES.

Statistics for the whole of the United States over a period of years are not available. At least two States, however, Massachusetts and Minnesota, have instituted inquiries. The following is from the report of the Massachusetts Commission on The Cost of Living, 1910:

"The general fact that rents have increased in the last ten or fifteen years is readily determined. The average percentage of increase cannot be stated definitely. In the light of the information gathered in this investigation, the approximate extent of the increase in the case of working people's dwellings and tenements might perhaps be indicated as about 12 per cent. Opinions obtained from a large number of competent observers of real estate conditions may be classified as follows:—

<i>Rent.</i>	<i>Per cent.</i>
Higher, no per cent stated.. . . . .	53.23
5 to 10 per cent higher.. . . . .	3.23
10 to 15 per cent higher.. . . . .	4.83
20 to 25 per cent higher.. . . . .	8.06
33 per cent higher.. . . . .	3.23
About the same.. . . . .	24.19
Lower.. . . . .	3.23

"While it is unquestionably true that in some cases rents are practically the same as they were fifteen years ago, or even lower, the great preponderance of evidence shows that throughout the State there has, on the average, been a decided increase. A distinction must be made, however, between new buildings and those built before the rise in prices. The rents in new buildings seem to a large degree to be based on the increased cost of construction. Rents in old buildings have increased somewhat, but not to the extent of those in more recent structures."

The following is from the Biennial Report, 1909-10, of the Minnesota Bureau of Labour:—

"The United Kingdom Board of Trade Investigation in the United States in 1909 contains the following:

"Although the predominant type of working-class dwelling in both the United States and England and Wales is that accommodating the single family, the exceptions to this prevailing rule are far more numerous in the former country, and the

<sup>1</sup> "The Course of Wages, 1900-1912." Journal of the Royal Statistical Society, December, 1913.

scale upon which the tenement house provision in the greater part of the City of New York departs from the more common practice is without counterpart in England and Wales.....

"While the classes of dwellings in the occupation of the working classes in the United States are thus considerably more composite than in England and Wales, the difference in the material of which they are constructed is still greater, frame or timber houses being the more usual type in the former country.....

"As regards the size of rooms, comparison has been found to be impossible, though the measurements ascertained by the investigators seemed to indicate that except in New York, where rooms are apt to be exceptionally small, the more general dimensions of rooms in American towns were somewhat greater than those usual in English towns.....

"In the following table the predominant rents for dwellings of three, four, five and six rooms in the United States are set out in comparison with those for England and Wales:—

PREDOMINANT RENTS OF WORKING-CLASS DWELLINGS IN ENGLAND AND WALES AND IN THE UNITED STATES.

Number of Rooms per Dwelling.	Predominant Range of Weekly Rents.		Ratio of Mean Predom- inant Rent in the U. S. to that in England and Wales taken as 100.
	England and Wales.	United States.	
Three rooms .....	3s. 9d. to 4s. 6d.	6s. 9d. to 9s. 7d.	198
Four rooms .....	4s. 6d. to 5s. 6d.	8s. 6d. to 12s.	207
Five rooms .....	5s. 6d. to 6s. 6d.	11s. 6d. to 14s. 11d.	220
Six rooms .....	6s. 6d. to 7s. 9d.	13s. ... to 17s. 4d.	213
Arithmetic Mean .....			209

"A further basis of comparison of rents as between the two countries is afforded by taking the mean of the various predominant ranges and comparing the average rent per room for the whole series. By this method the weekly rent per room in the United States is found to be 2s. 7½d., as compared with 1s. 3d. in England and Wales, equivalent to a ratio of 210:100.

"An alternative comparison may be made by re-working all the index numbers for the rents of the American towns to the basis used for the towns of England and Wales, viz., rents in the Middle Zone of London, that is, a very extended area, the inner boundaries of which are about two miles from the centre of London and the outer limits about four miles from that centre. This has been done in the following table:—

RENTS INDEX NUMBERS IN DESCENDING ORDER.  
London (Middle Zone)=100.

Town.	Index Number.	Town.	Index Number.	Town.	Index Number.
New York .....	160	Philadelphia .....	127	Cleveland .....	102
St. Louis .....	159	Minneapolis-St. Paul ..	123	Paterson .....	99
Pittsburg .....	151	Atlanta .....	122	Providence .....	96
Memphis .....	150	New Orleans .....	115	Detroit .....	94
Cincinnati .....	145	Savannah .....	114	Augusta .....	93
Brockton .....	136	Chicago .....	114	Fall River .....	90
Boston .....	132	Louisville .....	113	Baltimore .....	85
Birmingham .....	130	Milwaukee .....	108	Lowell .....	84
Newark .....	128	Lawrence .....	106	Muncie .....	71



“The mean index number on the above basis (of the rents of the Middle Zone of London) for all the towns investigated in England and Wales is 56·2; for the above American towns 116·6. The ratio of the American to the English mean is thus 207:100, about the same as the mean ratio of the predominant rents for each class of dwelling and as that obtained by comparing the general average per room as given above.

“The explanation of the higher rentals in the American towns investigated must be looked for in various directions, but principally in the higher cost of building as expressed by labour and materials, in the more generous allowance of ground space per dwelling, except in congested areas, in the more modern character of a greater proportion of the fittings and conveniences of the dwelling, as illustrated by the more frequent provision of bathrooms, in a higher general level of material prosperity that is able effectively to demand such increasing variety and completeness of accommodation, and in the shorter life that is expected from the individual dwellings.”

#### AUSTRALIA.

Rents have advanced rapidly in Australia, where the disproportion between urban and rural population is marked. The following table shows the extent of the rise in the capital cities of each state since 1901.<sup>1</sup>

COURSE OF HOUSE RENTS IN METROPOLITAN TOWNS, AUSTRALIA.  
(Rents 1901 equal 100.)

Year.	Sydney.	Mel- bourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average. (6 cities.)
1901 .....	100·0	100·0	100·0	100·0	100·0	100·0	100·0
1902 .....	100·0	101·4	100·6	100·0	99·3	100·2	100·5
1903 .....	100·3	101·9	103·6	100·0	100·1	100·8	101·0
1904 .....	100·6	104·2	103·9	100·0	99·6	101·0	101·9
1905 .....	103·3	105·1	106·1	111·5	92·3	101·8	103·8
1906 .....	103·8	106·6	107·2	120·8	89·3	102·7	105·1
1907 .....	106·0	109·6	117·7	128·9	85·5	106·1	108·3
1908 .....	107·5	112·9	126·0	138·5	84·7	109·0	111·3
1909 .....	111·1	114·8	135·3	149·3	83·3	112·3	114·9
1910 .....	114·9	125·0	143·2	161·8	86·9	116·2	121·9
1911 .....	126·2	132·2	156·6	176·6	101·2	120·6	132·4
1912 .....	136·7	138·5	164·5	184·2	109·4	124·2	140·8

Supplementary statistics for 1913 based on returns from thirty cities show that there has been a further advance amounting to about 4 per cent, being greatest at Victoria (over 5 per cent), while in South Australia a decline of 4½ per cent has taken place.<sup>2</sup>

<sup>1</sup> Six classes of houses are represented in these statistics, namely, houses having under four rooms, four rooms, five rooms, six rooms, seven rooms and over seven rooms. The index numbers are based on the “average” house rent in each of the cities, the average being obtained by multiplying the average predominant rent for each class of house by a number (“weight”) representing the relative number of houses of that class in the particular town as shown by the 1911 Australian census. The sum of the products thus obtained divided by the sum of the weights gives the weighted average for all houses. The result is a generalization which, of course, does not reveal the fact that the increase for some classes of houses has been greater than for others.—See Report No. 2 Labour and Industrial Branch, Commonwealth Bureau of Census and Statistics, Trade Unionism, Unemployment, Wages, Prices and Cost of Living in Australia, 1891 to 1912, pages 51 and 52.

<sup>2</sup> See Labour Bulletin, Labour and Industrial Branch, Commonwealth Bureau of Census and Statistics, February, 1914, page 253.

A table of predominate house rents in Australia follows:—

CURRENT WEEKLY HOUSE RENTS IN METROPOLITAN CITIES, AUSTRALIA, 1912.

Town.	Average Predominant Weekly Rents for Houses having.						Weighted Average for all Houses.
	Under 4 Rooms.	4 Rooms.	5 Rooms.	6 Rooms.	7 Rooms.	Over 7 Rooms.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Sydney.....	11 7	15 2	18 0	21 9	26 2	31 11	19 7
Melbourne.....	8 11	11 8	14 7	18 2	21 6	25 8	15 10
Brisbane.....	6 1	8 1	10 4	13 9	16 10	22 10	12 7
Adelaide.....	9 7	14 0	18 6	22 1	25 8	29 5	18 1
Perth.....	8 9	11 7	14 5	17 4	21 3	27 4	13 9
Hobart.....	7 4	9 10	12 0	14 5	17 6	20 8	12 11
Weighted Average of above and 24 other cities..	7 2	9 6	12 1	14 10	18 3	23 8	12 5

NEW ZEALAND.

The commission of 1912 on the Cost of Living estimated that there has been an advance of 20 per cent in working class rents during the past fifteen years.<sup>1</sup> In Auckland, where the most rapid increase in population has taken place, rents have increased 45 per cent. Increased ground values are held responsible for 25 per cent of the advance, and for the rest, the increased cost of building, the more exacting requirements of local authorities, increased rates, increased cost of new roads, and the general demand for more conveniences. An important witness before the Commission said that at Auckland in 1902 workmen's cottages of four rooms were let at 9s. per week, of six rooms at 14s. or 15s. per week, but that such houses are scarce now and about 20 to 25 per cent dearer than ten years ago.

A table of predominant rentals from the New Zealand Official Year Book for 1913<sup>2</sup> follows:

PREDOMINANT WEEKLY RENTALS, NEW ZEALAND, 1912.

City.	Pop.	Four Rooms.			Six Rooms.			Eight Rooms.		
		£	s.	d.	£	s.	d.	£	s.	d.
Auckland.....	47,783	0	10	9 94	0	16	2 80	1	2	4 08
Christchurch.....	55,098	0	10	5 97	0	15	5 22	1	0	8 82
Dunedin.....	48,988	0	16	6 01	0	15	11 21	1	4	0 22
Wellington.....	66,338	0	14	4 26	1	0	11 58	1	9	3 96

SOUTH AFRICA.

From the Report of the Economic Commission, January, 1914, the following table of average monthly rents of different working class dwellings in South Africa is taken, no historical data being available:

<sup>1</sup> Report of Commission on the Cost of Living in New Zealand, p. XX.

<sup>2</sup> Page 761.

AVERAGE MONTHLY RENTS OF WORKING-CLASS HOUSES IN FOUR TOWNS  
IN SOUTH AFRICA.

—	Cape Town.			Kimberley.			Durban.			Johannesburg.		
Index No.	43			92			60			100		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
<i>Three Roomed House:—</i>												
Average per House.....	1	17	6	3	0	0	2	15	0	4	10	0
Average per Room.....	0	12	6	1	0	0	0	18	4	1	10	0
<i>Four Roomed House:—</i>												
Average per House.....	2	7	6	4	10	0	3	15	0	6	0	0
Average per Room.....	0	11	10½	1	2	6	0	18	9	1	10	0
<i>Five Roomed House:—</i>												
Average per House.....	3	10	0	5	10	0	4	5	0	7	10	0
Average per Room.....	0	14	0	1	2	0	0	17	0	1	10	0
Additions for rates when not included in rent per room per month.....				0	6	0						
Average per room with rates added.....	0	12	9½	1	7	6	0	18	0¼	1	10	0

The Report of the Commission contains the following interesting notes on rentals:

“The predominant cost of working-class housing in England is about 5s. 6d. per room per month, including the kitchen, which is there used as a living room. The cost in Johannesburg, including the cost of the same local services and including the kitchen which is seldom so suitable for a living room as in England, is about 24s. per room per month. Consequently, if the cost in Johannesburg is put at 100, that in England becomes 23. It is estimated that a reasonable mean figure for South African towns is 80.....

“Rough calculations based on the Australian report of 1913 show that rent in Australia per room would come out at about 46, which is also the figure for New Zealand calculated from the New Zealand Year Book. On the average, Canadian working-class rents come to about 10s. 10d. a room per month according to the figures given in the Canadian *Labour Gazette* for July, 1913. Consequently the index number for Canada would be about 45. . . . .

“The ratio of expenditure on food to expenditure on rent varies greatly from place to place. In Johannesburg it is roughly 2 to 1, but in some places in South Africa it seems to be somewhat more. According to the reports of the English Board of Trade already referred to, in America it is 3 to 1, in England and Germany about 4 to 1, and in France and Belgium about 5 to 1. In Australia, New Zealand and Canada it is estimated as 3 to 1. Habits and customs, wages and the cost of housing, all play their part in determining the proportion. . . . .

“Rent is the chief factor in the high cost of living in South Africa. Rents for white working-class dwellings are high throughout the country, and correspond to about half of the family expenditure on food. The evidence laid before Your Commissioners is also to the effect that in no town of the Union is house property a good investment, and this was emphasized by the statement that at the present time it is advisable to buy rather than to build; for the original cost of erection is seldom reached when the property is sold.

“It is therefore clear that high rents are the result of some cause which prevails throughout South Africa, and that while local causes, such as uncertainty about the future, heavy municipal rates or high cost of land, may locally have some effect, they

cannot be the main cause of this exceptional state of things. Railway rates on building material, though also entering into the question, have only a limited effect, for it is clear that the position exists at the coast as well as inland. . . . In the opinion of Your Commissioners a leading cause of high rents is the division of the South African community into two distinct racial strata with widely differing standards of living and purchasing power. The class of house considered is provided only for the whites, and, as the latter are comparatively limited in number, the supply is subject to all the uncertainty of a small market, and the cost of building for this reason is also high. This, together with the high rate of interest prevailing, largely determines rents, cost of importing material being of course another item. . . .

"This condition of things is not confined to the Union of South Africa. From the recent report from Southern Rhodesia on the cost of living, Your Commissioners make the following extract: 'Complaint against the rent charge is universal. On the subject of rents generally there is the strongest feeling, the average rent paid in Rhodesia being rather more than £6 a month for a three-roomed cottage'."

## FRANCE.

Working-class rentals in Paris went up about 8 per cent between 1900 and 1910. The estimate is based in part on value of house property for revenue purposes and in part on records of rents actually paid by the occupiers of a selected number of identical dwellings (in number 2,526).

The following table of predominant rents in France is from the United Kingdom Report of 1909:—

PREDOMINANT RANGE OF WEEKLY RENTS FOR FRANCE.

	Two Rooms.				Three Rooms.				Four Rooms.			
Paris . . . . .	3s.	1d.	to	6s.	2d.	4s.	7d.	to	7s.	5d.	6s.	2d.
Rest of France . . . . .	2s.	4d.	to	2s.	10d.	2s.	11d.	to	4s.	2d.	3s.	6d.
												to 7s. 8d.
												to 4s. 4d.

The report states:

"There are two types of working-class housing which appear to be prevalent. The first of these, which is predominant in about one-half of the towns, is a flat in a house let out in several separate dwellings. Thus in Paris the working classes are housed chiefly in tenement houses of five, six or seven stories in height; in Marseilles houses of the modern type have five stories, with two to six tenements on each floor; in Brest the predominant type of house has four or five stories, with an average of 5.4 dwellings; and in St. Etienne there is an average of 5.5 tenements to each house. Other towns in which large tenement houses of various sizes predominate are Lyons, Grenoble, Limoges, Nantes, Havre, Rouen and Rennes. The second type, found in about one-third of the towns, is a small house or cottage, standing generally in rows but often detached, consisting of one or two stories and of one to four rooms; these are sometimes two-tenement houses and sometimes one-family houses."

## GERMANY.

In 1908 predominant rents in Germany were as follows:—

## PREDOMINANT RANGE OF RENTS, GERMANY.

	For Two Rooms.				For Three Rooms.			
	s.	d.	s.	d.	s.	d.	s.	d.
Berlin.....	5	0	to 6	0	7	0	to 9	3
Other German Towns .....	2	8	to 3	6	3	6	to 4	9

As to the character of housing in Germany, the United Kingdom Board of Trade states:—

“The prevalent type of working-class dwelling in Germany is a flat in a large house containing a minimum of six or seven tenements. This may fairly be described as the common type of housing accommodation for *all* classes in Germany, and it is a characteristic feature of German towns that, whilst there are purely working-class districts, yet the working classes are generally scattered throughout the whole of a town, occupying either the upper floors of houses whose lower floors may be occupied by middle-class tenants, or else housed in buildings which lie concealed behind the better-class houses visible from the street. There are some exceptions, but as a general rule the large house with a considerable number of tenements is becoming more and more predominant.”

## BELGIUM.

From the United Kingdom Board of Trade investigation published in 1910 are taken the following:—

## PREDOMINANT RENTS OF WORKING-CLASS DWELLING IN BELGIUM.

Number of Rooms per Dwelling.	Number of Towns to which the figures relate.	Predominant Range of Weekly Rents.
Two Rooms.....	12	1s. 9d. to 2s. 3d.
Three Rooms .....	11	2s. 2d. to 2s. 10d.
Four Rooms .....	12	2s. 8d. to 3s. 6d.

“The types of housing found in the Belgian towns investigated present on the whole great uniformity and approximate somewhat closely to those which prevail in English industrial towns; that is to say, the small house occupied by one or two families is the predominant type, whilst tenement houses play only a very small part, and even where they exist are rarely of large size. Tenement houses appear to be of importance only in Antwerp, where there are a number which are considerable in size, in some parts of Greater Brussels, in the centre of Liège, to a small extent at Charleroi, at Tournai, and particularly at Verviers.”

## NORWAY.

Statistics relating to Christiania show a rise of five per cent in rentals between 1901 and 1912. The house rent paid annually by a typical working-class family in 1912 is placed at \$75.00.



## APPENDIX No. 7.

*Exhibit contributed by Department of Labour, Canada, through Mr. R. H. Coats.*

## WAGES AND HOURS OF LABOUR, CANADA, 1900-1913.

Recent tendencies in wages and hours of labour require careful examination in an inquiry into the cost of living. If wages and prices advance or recede *pari passu*, the situation is fundamentally unchanged. Again, during the past decade, the rise in wages which labour has been able to obtain, accompanied in many instances by decreases in working hours, has been cited as a primary cause of the general enhancement of commodity prices, labour costs being an omnipresent and most important element in expenses of production.<sup>1</sup>

## I.—RATES OF WAGES—"NOMINAL" WAGES.

Since 1900, publication has been regularly made in the *Labour Gazette* of various wages statistics, including large numbers of fair wages schedules currently prepared for insertion in government contracts (relating almost wholly to the building trades), as well as the results of more extended investigations into current rates in the more important industries and trades. For the present purposes the most useful data are contained in (1) a quarterly record of changes in wages and hours maintained by the department, and (2) the results, as yet unpublished, of a comprehensive investigation into tendencies in wages and hours in representative occupations throughout Canada since 1900.

<sup>1</sup> On wages statistics in general, Scott Nearing,—(Wages in the United States, p. 5) says: "There are at least three directions in which a study (into rates of wages) if carefully made would be of supreme importance,—first, in the discussion of wage theories; second, in the discussion of the cost of living; and, finally, in the problems arising out of the standard of living. The aggregate necessity of the three problems makes the presentation of statistics of wages ultimately imperative."

Sir Louis Mallet before the Gold and Silver Commission of 1888 (Third Report, p. 420) discusses the significance of wages changes in relation to prices: "It is a question of great importance, whether low prices are caused by an increased production of commodities relatively to the standard of value, or by a decreased supply of the standard of value relatively to commodities..."

"Fortunately there is a test, by the application of which we may be enabled to decide as to which of these two causes, a fall of prices is attributable.

"In both cases the quantity of labour may be assumed to be the same, for we have assumed that there has been no sudden addition to the supply of labour corresponding with the increased supply of commodities. If then the fall in prices has been due to what is commonly, but loosely, called over-production of commodities, and not to a scarcity of the standard metal, it cannot affect wages. These will remain the same, and the working or wage earning class will have its full share in the increased abundance.

But if, on the other hand, a fall of prices is due to a diminished supply of the standard metal the price of labour will be affected, as the price of everything else is affected, and wages will inevitably fall. The condition of the working classes will not be worse, for all that they consume will be proportionately cheaper, but it will be in no way improved. Cheapness in money value and cheapness in labour value may coincide, but they have no necessary connexion. Things may be cheap merely because gold is dear, not because there is an abundant supply of them, but in this case labour will be cheap too. If the price of labour falls at a time when general prices are falling, it may be inferred that the cause is an appreciated currency. If low prices are the result of an increased return to labour owing to improvements in production, or increased facilities of communication and exchange, the value of labour and the wages of labour (its quantity remaining the same) will relatively rise.

"The truth seems to be this: when prices are rising there is a constant effort on the part of the producing classes to increase production and reap the gain to create a new supply, to meet the new demand. When prices are falling there is a constant tendency on the part of the same classes to diminish their production, so as to avoid the risk of loss, to diminish the supply in order to meet the diminished demand."



## (1) DEPARTMENT OF LABOUR RECORD OF CHANGES IN WAGES.

The record of current changes in wages and hours of labour is published quarterly in the *Labour Gazette*. The record was begun in 1902 but was not finally systematized until January, 1903, since when it has aimed to include detailed statistics with regard to every change in wages and hours affecting work-people throughout Canada.<sup>1</sup> The accompanying series of tables gives the facts of the record in condensed form. It shows for each year the total number of workpeople affected by changes in wages and hours and the estimated total increase or decrease in the weekly wages bill and working time resulting, the figures being classified according to industries and groups of trades. At the close of the series two summary tables will be found, the first reassembling the aggregate annual results of the preceding, and the second showing the numbers of changes affecting in each case a specific group of workpeople which occurred in each year of the period.

A general summary of the information contained in the series of articles upon which the tables are based is as follows:—

**1902.**—The upward movement was noted as an important feature early in 1902. Even at that date the advancing cost of living was to some extent made the basis of demands, though the prosperity of trade and industry, and the increasing competition among employers for labour were factors more frequently cited. The advance was particularly pronounced in building trades, but by the close of the year there were few localities or classes of labour which had not felt its influence.

**1903.**—These conditions were continued and intensified in 1903. A new feature was the increasing friction between employers and employed. Especially was this the case in the building trades, where strikes to enforce higher wages retarded operations both east and west. Difficulties also occurred among transportation employees. Increases to both skilled and unskilled factory labour were on the whole easily obtained on account of the pronounced shortage of hands, which finally became the cause of Government consideration in Ontario. The feature of the year was the widespread, almost omnipresent, nature of the upward movement, especially during the summer months.

**1904.**—The winter began with serious interruption of transportation, through abnormal weather conditions affecting all classes of trade and industry, particularly in Eastern Canada. Later on, however, there was a continuance of the wages advance in the building trades, but the mining and lumbering industries saw reductions for comparatively large bodies of less skilled men. In the final summing up the increases of the year did not greatly overlap the decreases. A widespread movement for earlier closing and a weekly half-holiday began to appear, many factories and large departmental stores making concessions, whilst the trades generally secured permanent gains in the way of reduction of working hours. In the paper and pulp-making industries, however, hours were increased.

**1905.**—The predominating tendency was upward, though not so generally as in 1902 and 1903. Advances to the building groups were again conspicuous, but only to about one-third the extent of 1903, both as regards number of workmen and amount of increase. The most important change of the year, so far as numbers were concerned, was probably in farm labourers wages, both in Ontario and in the wheat growing provinces of the West, where harvesting was delayed by lack of labour. With regard to hours, Provincial Legislation (as in the British Columbia enactment *re* hours of underground miners), and civic by-laws (as in Montreal and other cities, limiting hours of retail clerks) brought about material reductions to large bodies of employees.

<sup>1</sup> Doubtless there are changes which escape notice, and the record does not include those far-reaching movements affecting individuals, which are frequently in the aggregate an important consideration, i.e., only such changes as involve a group of employees are taken. The record, however, enables a fairly definite idea to be obtained of the current wages movement among the larger aggregations of workpeople.

1906.—In this year the upward movement in wages was again in full progress, having regained the widespread range and buoyancy characteristic of 1902 and 1903. Even the high record of the latter year was exceeded, the amount of the increases recorded being double, with two and one-half times the number of work-people participating, amongst them being large bodies of employees in the railway service, the mining industry, textile manufacturing, and unskilled labour engaged in railway construction and harvesting.

1907.—Wages continued to rise throughout the first half of 1907 which was a period of great activity for all classes of labour. The increases (nearly all of which occurred during the earlier months of the year) affected fully 100,000 men, of whom the transportation service contributed a large proportion, with lumbering and mining employees coming next in order. The building trades, though out-classed in numbers and amount of increase, profited to more than double the extent of the previous good year, with one-third more men participating. A sharp recession in the autumn, however, which reflected the financial crisis and the short crop, wiped out by about one-third the advance made during the earlier portion of the year, the wages of unskilled labour, more particularly in the lumbering industry being immediately affected. This class, together with the less skilled and imperfectly organized trades suffered the most heavily during the winter of 1907-8; those working under agreement being for a time able to hold their gains.

1908.—As the effects of the depression were more fully felt, decreases in wages were made in factories, and in the building and other trades, and at the close of 1908, every trade and industry of which the department had information, except the printing trade, showed a more or less heavy preponderance of decreases, the final results giving an adverse balance—the only year in which this occurred during the decade under consideration.

1909.—Although some signs of strength in the situation were discernible towards the close of 1908, wages did not again tend upward until well towards the summer of 1909, except in the West where the recovery was more rapid, owing to the strong upward movement of real estate and the large amount of railway construction under way. With returning confidence came a better demand for labour, and at the time, owing to the increasing cost of living a general and vigorous movement for higher wages, which met with sufficient response to show a net increase in the annual summing up. A feature was the suddenness with which the upward movement, once begun again, attained large proportions.

1910-1913.—During 1910 the upward tendency increased, a condition which became more accentuated during 1911 and 1912, and reached its culmination in the early summer of 1913, making a third period of great general prosperity and advancement, in which all classes of labour, but particularly the printing, building, transportation, and unskilled classes, shared very largely. The cessation of the advance in the latter part of 1913, resulting from the check to business administered by the increasing tightness of money, affected the final results for the year to an appreciable extent, the situation being in some degree parallel to that of 1907, though the reaction was much less sudden. On the other hand, the advance movement during the later period did not reach the rapidity of 1906-7. The depression was felt earlier and with greater severity in the West than elsewhere, thus in another aspect reversing the conditions of 1907-8. The increasing cost of living, both East and West, all through the quadrennium 1910-13, formed the prevailing plea for advancement in salaries and wages.

The records of changes in hours show that the movement for shorter hours kept pace on the whole fairly equally with that for increases in wages, being perhaps more pronounced in the last three years, the aggregate reduction for 1911-12 and 1913 being far in excess of any similar period during the decade. No single year, however, came up to the record of 1903, although 1913 came very close. Altogether, of 1670 changes

in wages and hours recorded since January 1st, 1903, some 320 were of the nature of decreases in hours, while thirteen only involved increases. Increases in hours were, therefore, practically a negligible quantity, 1904 being the only year in which any appreciable lengthening of hours occurred, (apart from seasonal changes in certain trades) and the largest portion of this was a temporary requirement in railway and other machine shops, caused by the abnormal demand for repairs, etc., owing to damage and destruction of rolling stock.

A brief recapitulation of the above by industries and trades follows:—

*Building trade.*—The very material gains of 1903 were not again approached until 1911, and were only surpassed in 1912, the highest year in the third cycle of advances.

*The Metal and Engineering trades,* show about the same records in amount of increase and number participating in 1903, 1907, and 1910 with advanced aggregates in 1911 and 1912, the latter being their highest year in the decade.

*The Woodworking trades* reached their highest aggregate increase in 1913. The records show that the advances of 1903-1907 were practically wiped out by the adverse balance in 1908. A considerable recovery occurred during 1910, followed by a stationary period until 1913. Returns for these trades are meagre.

In the *Printing trades*, while the numbers benefited did not bulk largely against the trades with more numerous followings, progress during the decade has been remarkably steady, not having been interrupted even in the year 1908.

In the *Clothing trades*, the outstanding years are 1903 and 1913. In the former, the number benefited was the greater, but the amount gained was larger in the latter. Statistics in this trade in the intervening years are not satisfactory, and the same may be said of the *Food and Tobacco Preparation Classes* where the years 1903, 1907, 1912 and to a less extent 1910 and 1913 are the only periods in which returns of any importance were received. The high years were 1907 and 1912.

The year of most rapid advance for *Municipal* and other *public employees* was 1911.

In *Lumbering* the year of highest increase was 1907, but against this the decreases of 1908 were almost as great. Statistics for this class are approximative.

In the *Transportation service*, 1907 showed 40,000 employees participating in an advance estimated at \$50,000 per week, the record being more than double that of any other year, with 1906, 1910, 1911 and 1913 approaching each other very closely in amount of weekly increase (\$22,000—\$25,000).

In the *Textile industry* the first statistics relate to 1906. Apart from that year the only records of note are those of 1907 and 1908, where an increase of \$68,000 in the former year, affecting 95,000 work people (many of whom were women and children) was practically all lost during the reverse of 1908. 1912 saw an advance to some 6,000 workers. This class has profited permanently through the reduction of working time by legislation.

The advance movement in the *Mining industry* apparently began in 1905, showing a decided improvement in the next year, both as regards men and amount, and a very marked upward trend in 1907, when advances affecting 13,000 miners, both coal and metalliferous, were recorded. These gains did not succumb to the drop of 1908, though there was little movement in 1909 and 1910. 1911 and 1912 were more active.

*Unskilled Labour.*—The difficulty of obtaining anything like accurate or continuous statistics has been very great. The statistics in 1903 took cognizance only of comparatively small bodies of men, but undoubtedly large numbers received a permanent addition to scale. After that year it may be said in a general way that unskilled labour lost some ground during 1905, profited largely during 1906, but lost again during the 1907-8 period of depression. The years 1909 and 1910 saw a recovery and 1912 a decidedly upward tendency. A recession has since occurred.

TABLE Showing Results of Changes in Wages and Hours by Industries and Groups of Trades.

Trade or Industry.	Wages.				Hours.			
	Increases.		Decreases.		Decreases.		Increases.	
	Number of work-people affected.	Total increase in weekly earnings.	Number of work-people affected.	Total decrease in weekly earnings.	Number of work-people affected.	Total decrease in hours of employment.	Number of work-people affected.	Total increase in hours of employment.
		\$ cts.		\$ cts.				
1903.								
Building.....	11,689	24,307 65	400	160 00	4,364	23,960		
Metal and engineering.....	1,862	2,302 55	27	23 85	809	4,215		
Wood working.....	542	588 75	19	78 50	1,581	7,430		
Printing.....	357	966 50			253	1,411		
Clothing.....	4,277	2,880 50			780	3,240		
Food, drink and tobacco preparation.....	644	599 50			150	750		
Leather.....	453	440 00						
Miscellaneous.....	355	318 00	15	22 50	616	3,605		
Municipal employees.....	2,025	1,926 65			115	645		
Mining.....								
Lumbering.....	280	474 00						
Transportation—Steam railway.....	9,660	14,644 00	27	17 85	358	693		
Street or electric.....	387	661 00						
General.....	1,202	1,907 00						
Textile.....	4,118	7,278 20	975	1,462 50	2,225	13,225		
Unskilled labour.....								
	38,071	59,294 30	1,463	1,715 20	11,251	59,204		



TABLE of results of changes in Wages and Hours by Industries and Groups of Trades.

Trade or Industry.	Wages.			Hours.		
	Number affected.	Weekly increase.	Number affected.	Weekly decrease.	Number affected.	Weekly increase.
<b>1904.</b>						
Building.....	1,841	\$ 3,766 50	4	\$ 12 00	792	\$ 3,020 00
Metal and Engineering.....	645	796 55	82	145 90	750	1,600 00
Woodworking.....	475	527 50			352	352 00
Printing.....	3,455	3,236 25	6	6 00	15	30 00
Clothing.....	211	323 35			17	102 00
Food, Drink and Tobacco Preparation.....	12	20 00				
Leather.....	12	20 00				
Miscellaneous.....	220	567 00			25	100 00
Municipal Employees.....	1,373	1,489 00			{ 31,200 00	
Mining.....					{ 2,011 00	1,885 00
Lumbering.....	1,981	2,745 25	11,331	11,472 00	36	216 00
Transportation—Steam.....	1,068	905 90			200	1,800 00
Street.....	249	526 50			476	1,174 00
General.....						
Textile.....	1,325	1,641 00				
Unskilled Labour.....	12,855	16,544 80	11,423	11,636 90		
					8,288	41,605 00
						6,655 00
<b>1905.</b>						
Building.....	3,783	8,504 55	90	54 00	354	1,956 00
Metal and Engineering.....	393	868 30			175	775 00
Woodworking.....	9	9 00	19	19 00		
Printing.....	73	101 00				
Clothing.....	279	669 00			382	1,896 00
Food, Drink and Tobacco Preparation.....	10	12 00			86	216 00
Leather.....	16	53 00				
Miscellaneous.....	690	1,058 50	25	50 00	92	1,010 00
Municipal Employees.....	1,584	1,444 66	12	33 70		
Mining.....	391	666 90			421	8,864 00
Lumbering.....	5,000	5,000 00				
Transportation—Steam & railway.....	742	574 55				
Street.....	517	312 60				
General.....	1,045	2,790 00				
Textile.....						
Unskilled Labour.....	990	792 00	6,080	9,120 00		
					60	370 00
	15,562	22,856 00	6,226	9,276 70	1,410	14,717 00
						418 00



TABLE of Results of changes in Wages and Hours by Industries and Groups of Trades—Continued.

Trade or Industry.	Wages				Hours.			
	Number Affected.	Weekly Increase.	Number Affected.	Weekly Increase.	Number Affected.	Weekly Increase.	Number Affected.	Weekly Increase.
		\$ cts.		\$ cts.		\$ cts.		\$ cts.
<b>1906.</b>								
Building.....	5,630	8,334 30	60	54 00	754	4,432 00	.....	.....
Metal and Engineering.....	817	1,212 00	119	164 50	200	1,130 00	.....	.....
Woodworking.....	148	150 30	.....	.....	360	3,240 00	.....	.....
Printing.....	432	567 50	.....	.....	674	3,614 00	.....	.....
Clothing.....	220	165 00	.....	.....	2,650	7,950 00	.....	.....
Food, Drink and Tobacco preparation.....	130	280 00	.....	.....	25	275 00	.....	.....
Leather.....	175	131 25	.....	.....	.....	.....	.....	.....
Miscellaneous.....	92	188 50	16	72 00	331	1,171 00	.....	.....
Municipal.....	1,282	1,836 15	5	4 90	.....	.....	.....	.....
Mining.....	1,190	1,448 30	43	136 50	305	5,156 00	5	6 00
Lumbering.....	6,130	6,019 50	.....	.....	.....	.....	.....	.....
Transportation—Steam.....	18,394	19,320 95	.....	.....	72	432 00	.....	.....
Street.....	1,150	763 10	72	104 40	.....	.....	.....	.....
General.....	1,397	2,293 50	.....	.....	.....	.....	.....	.....
Textile.....	2,600	2,340 00	.....	.....	.....	.....	.....	.....
Unskilled Labour.....	50,100	75,300 00	.....	.....	.....	.....	.....	.....
	89,888	120,355 35	315	536 30	5,371	27,400 00	5	6 00
<b>1907.</b>								
Building.....	7,488	17,278 60	735	1,322 50	1,790	8,795 00	.....	.....
Metal and Engineering.....	1,801	2,333 45	.....	.....	370	1,850 00	.....	.....
Woodworking.....	135	113 75	.....	.....	351	1,825 00	.....	.....
Printing.....	171	248 00	.....	.....	2,543	14,853 00	.....	.....
Clothing.....	312	610 10	.....	.....	.....	.....	.....	.....
Food, Drink and Tobacco preparation.....	1,430	1,430 00	.....	.....	300	750 00	.....	.....
Leather.....	370	270 50	.....	.....	15	90 00	.....	.....
Miscellaneous.....	1,038	1,038 00	.....	.....	435	2,912 00	.....	.....
Municipal Employees.....	2,329	4,111 15	.....	.....	182	814 00	.....	.....
Mining.....	13,098	24,896 90	2,200	8,220 00	410	2,470 00	.....	.....
Lumbering.....	21,000	24,375 00	5,100	6,460 00	.....	.....	.....	.....
Transportation—Steam.....	32,333	42,317 20	.....	.....	1,955	11,730 00	.....	.....
Street.....	4,286	4,114 40	.....	.....	.....	.....	.....	.....
General.....	2,867	5,474 00	.....	.....	1,000	3,000 00	.....	.....
Textile.....	9,678	6,865 00	11,000	26,500 00	.....	.....	.....	.....
Unskilled Labour.....	353	219 00	.....	.....	.....	.....	.....	.....
	98,689	135,695 05	19,035	42,502 50	9,351	40,119 00	.....	.....

TABLE of Results of changes in Wages and Hours by Industries and Groups of Trades—Continued.

Trade or industry.	Wages.				Hours.		
	Number affected.	Weekly Increase.	Number affected.	Weekly Decrease.	Number affected.	Weekly Decrease.	Weekly Increase.
		\$ cts.		\$ cts.		\$ cts.	\$ cts.
1908.							
Building .....	1,012	2,115 50	1,645	4,698 00	182	962 00	
Metal and Engineering .....		2,415 50	1,612	2,415 50			
Woodworking .....		290 00	920	1,380 00			
Printing .....	130	90 00			11	66 00	
Clothing .....	90		55	66 00	90	540 00	
Food Drink and Tobacco preparation ..							
Leather .....							
Miscellaneous .....	315	650 85	3	4 50			
Municipal .....	2,020	435 00	120	180 00			
Mining .....			11,472	31,684 40			
Lumbering .....	1,774	1,817 00	255	255 90			
Transportation—Steam .....	600	380 00					
Street .....	186	563 50	400	1,200 00			
General .....			8,000	6,400 00			
Textile .....			10,300	25,180 00			
Unskilled Labour .....	6,127	6,341 85	34,782	73,464 30	283	1,503 00	
1909.							
Building .....	1,927	6,041 05	70	75 60	70	420 00	
Metal and Engineering .....	184	183 50	285	1,196 25	159	806 00	
Woodworking .....	70	131 60					
Printing .....	1,766	2,075 50					
Clothing .....	31	62 00			208	1,768 00	
Food, Drink and Tobacco preparation ..	60	120 00					
Leather .....							
Miscellaneous .....							
Municipal employees .....	1,717	4,169 30			124	744 00	
Mining .....	800	384 00					
Lumbering .....	8,500	10,025 00					
Transportation—Steam .....	1,524	1,392 95					
Street .....	298	373 20					
General .....	700	1,050 00					
Textile .....	12,150	25,243 00					
Unskilled Labour .....	29,667	51,251 10	355	1,271 85	561	3,738 00	

TABLE of Results of changes in Wages and Hours by Industries and Groups of Trades—Continued.

Trade or industry.	Wages.				Hours.		
	Number affected.	Weekly Increase.	Number affected.	Weekly Decrease.	Number affected.	Weekly Decrease.	Weekly Increase.
		\$ cts.		\$ cts.		\$ cts.	\$ cts.
<b>1910.</b>							
Building.....	8,739	15,107 90	360	108 00	360	2,160 00	
Metal and Engineering.....	2,323	2,011 90					
Woodworking.....	650	750 00					
Printing.....	695	1,437 00			182	1,000 00	
Clothing.....	2 0	332 50					
Food, Drink and Tobacco Preparation.....	329	493 50			800	4,125 00	
Leather.....	450	540 00			40	240 00	
Miscellaneous.....	3,131	10,260 00					
Municipal.....	438	587 60					
Mining.....							
Lumbering.....	950	912 00					
Transportation—Steam.....	9,529	18,535 15					
Street.....	3,373	3,703 80	100	120 00	250	1,050 00	
General.....							
Textile.....	2,000	2,605 00					
Unskilled Labour.....	32,867	57,276 35	460	228 00	1,632	8,375 00	
<b>1911.</b>							
Building.....	14,556	23,829 25	775	996 50	1,689	7,770 00	
Metal and Engineering.....	2,387	4,931 40			53	278 00	
Woodworking.....	42	37 80					
Printing.....	210	880 00			60	180 00	
Clothing.....							
Food, Drink and Tobacco Preparation.....	189	189 00			153	870 00	
Leather.....							
Miscellaneous.....	{ 118	177 00					
Municipal and Govt. Employees.....	435	576 15	9	13 50	170	1,390 00	
Mining.....	5,082	8,845 35			35	210 00	
Lumbering.....	7,000	10,000 00					
Transportation—Steam.....	140	330 00					
Street.....	11,705	16,955 00					
General.....	2,575	1,792 00					
Textile.....	785	1,630 00			9,000	18,000 00	
Unskilled Labour.....							
	45,184	70,222 95	784	1,010 00	11,162	28,698 00	

TABLE of Results of changes in Wages and Hours by Industries and Groups of Trades—Continued.

Trade or Industry.	Wages.			Hours.		
	Number Affected.	Weekly Increase.	Number Affected.	Weekly Decrease.	Number Affected.	Weekly Increase.
1912.						
Building	15,178	\$ 35,364 20	137	\$ cts.		\$ cts.
Metal and Engineering	1,535	3,003 80	32	199 00	1,463	7,569 00
Woodworking				163 20	402	2,182 00
Printing		2,553 00			20	120 00
Clothing	1,179	227 00				
F., D. and T. Prepn.	1,141	1,901 30			545	4,820 00
Leather						
Miscellaneous	696	632 00				
Municipal	1,038	2,490 85				
Mining	2,815	4,429 50				
Lumbering	2,395	2,014 00				
Transportation	1,743	1,962 00				
Steam	5,614	7,319 00	180	158 40	180	1,980 00
Street	2,820	6,015 00				
General	6,300	3,000 00			6,300	12,600 00
Textile	10,415	12,334 50			520	2,120 00
Unskilled Labour	52,997	83,206 15	359	520 60	9,430	31,220 00
1913.						
Building	13,177	27,897 20	79	49 30	966	4,208 00
Metal and Engineering	4,879	7,471 05	1,118	295 35	2,060	8,060 00
Woodworking	920	3,112 00			330	1,840 00
Printing	750	1,386 00			157	702 00
Clothing	2,695	3,325 00				
F., D. and T. Prepn.	440	604 00				
Leather	80	100 00				
Miscellaneous	2,069	3,581 00			1,485	8,855 00
Municipal	1,907	2,541 80			1,200	7,200 00
Mining	750	775 00				
Lumbering	450	1,050 00				
Transportation - Steam	13,865	18,500 70			25	150 00
Street	4,122	3,568 05				
General	1,193	1,863 09			200	1,200 00
Textile			70	105 00	6,000	18,000 00
Unskilled Labour	4,691	4,168 20				
	51,378	79,979 00	1,207	440 65	12,423	50,205 00
						216 00
						2,166 00
						3,342 00





## (2) SPECIAL INVESTIGATION OF WAGES TENDENCIES, 1900-1913.

The above gives only partial information as to the wages movement. More valuable data for the present purpose may be gathered from an investigation begun by the department in 1912 into rates of wages in the leading industries and trades since 1900. The collection of materials in this connection (including the collating of all previously gathered data) is not yet completed, but several thousands of authentic records of representative classes in the chief centres have been assembled and are available for reference. The large table published at the end of the chapter is made up of selections from these records, and a word of explanation as to the method in which it has been prepared, as well as its purpose and significance is called for.

The aim of the table is to present a series of continuous statistics of actual wages and hours which may be regarded as fairly typical of the wages situation since 1900. The departmental investigation covers the leading occupations in each of the chief industries and groups of trades in the larger towns and cities. From each of these groups a limited number of returns were for the present purpose taken, the classes and localities being selected with the object of making the table representative of such features as geographical distribution, sex of employees, proportion of highly skilled to low-grade workers, proportion as between large and small centres of population, etc., etc. For example, the department's investigation in the building trades embraces fourteen classes of labour in the ninety-two localities throughout Canada having a population of 5,000 or over (about thirteen hundred series in all), whereas the table herewith quotes six classes in thirteen scattered localities (i.e., seventy-eight series of quotations). Inevitably certain features are more satisfactorily covered in a limited survey like this than others.

In order to show the general significance of the table, index numbers have been worked out for each group of trades and for the entire list with the year 1900 as a basis. This will be found in the table beginning on the following page. In constructing these numbers the statistics of wages have been reduced to a weekly basis so as to make allowance for current change in hours and thus to reflect net earning capacity.

*Extent of the rise in wages, 1900-1913.*—It would appear from this estimate that wages in Canada since 1900 have shown a continuous and at times (as in the past three years) rapid advance.

The following table of aggregate index numbers with the chart on the following page will show how this has proceeded from year to year:—

1900.. . . . .	100.0
1901.. . . . .	102.0
1902.. . . . .	104.3
1903.. . . . .	106.1
1904.. . . . .	108.8
1905.. . . . .	111.6
1906.. . . . .	114.5
1907.. . . . .	119.2
1908.. . . . .	121.1
1909.. . . . .	125.4
1910.. . . . .	129.7
1911.. . . . .	133.1
1912.. . . . .	139.3
1913.. . . . .	142.9

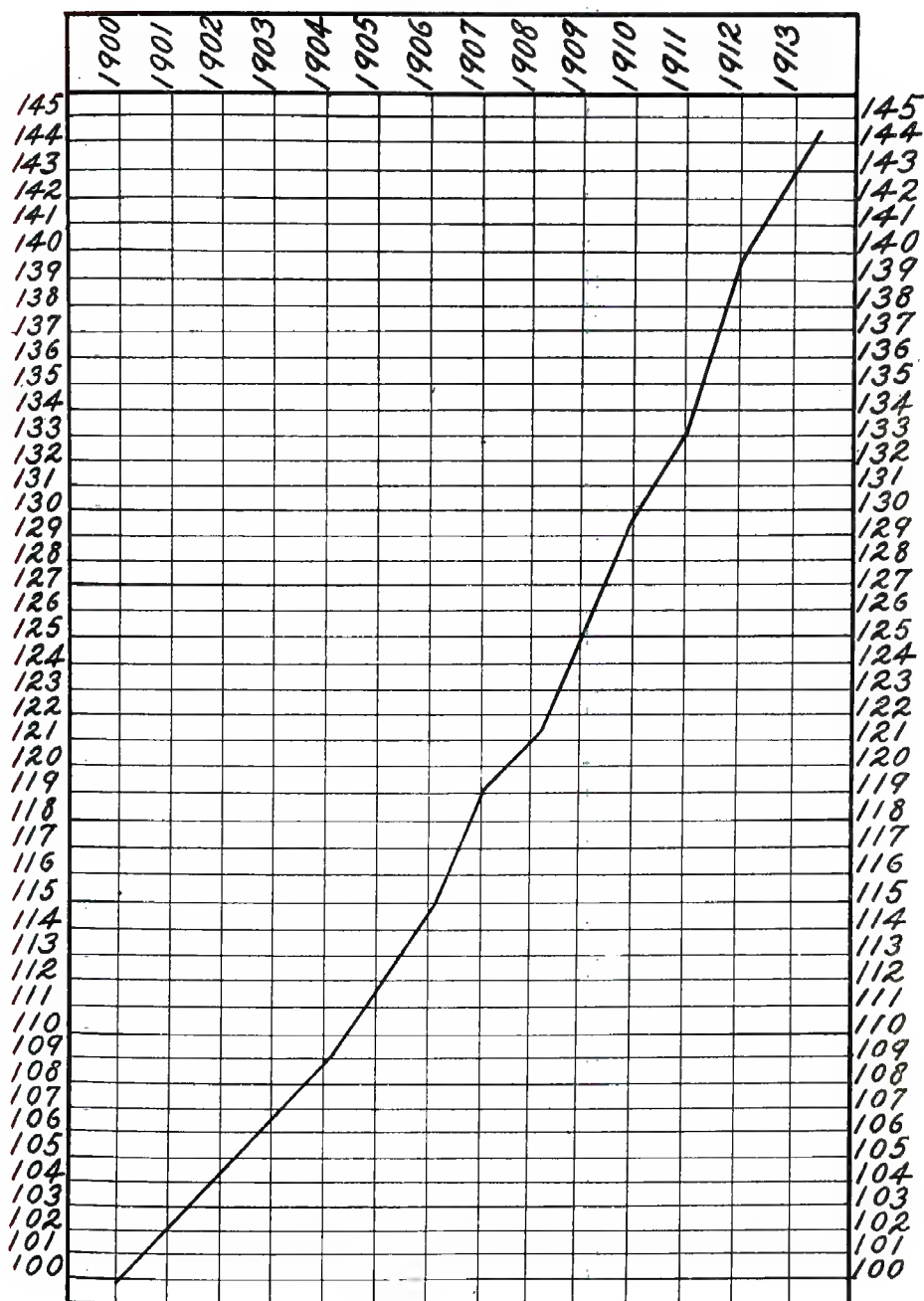
Altogether the rise between 1900 and 1913 is shown at approximately 43 per cent.

By occupations, the chief rise would appear to have been in domestic service, namely, over 70 per cent. In agriculture, the rise is 50 per cent. Skilled and well organized trades (printing, clothing and building) are about the same. Electric railway employees have gone up even faster, this being a reaction from a low rate ten years ago. In most of the other branches the advances lie between 30 and 40 per cent.

In presenting these results it must be remembered that the scope of the return is restricted, considering the vastness of the field, and that it includes a liberal representa-

## WAGES, CANADA, 1900-1913.

(Wages 1900=100).



tion of the more skilled and highly organized branches in the larger centres, and of branches, like agriculture and domestic service, in which conditions as between supply and demand have been abnormal.<sup>1</sup> Needless to add, as will be pointed out in detail further on, the figures do not reflect such important factors as employment or the growth in the division of labour. It may be said for the return, however, that it exhibits a series of about 1,000 continuous and reliable records back to 1900 picked over the available field with the sole purpose of rendering the final result as representative as possible. It will enable certain salient features of the wages movement by branches of trade to be seen in outline, and it permits the generalization that rates of wages have advanced by anything from 25 to 50 per cent, according to class, between 1900 and 1913.

A system of "weighting" the averages would partly meet the objection arising out of the paucity of returns, but as already pointed out satisfactory statistics for this purpose are lacking. From Census Bulletin No. 1, of the Census of 1911, "Wage Earners by Occupations," corrected by Bulletin No. 1, of the Census of 1911, "Manufactures of Canada," a series of groups weights were devised and, the following aggregate index numbers obtained: 1900, 100; 1901, 101.6; 1902, 103.8; 1903, 106.5; 1904, 109.3; 1905, 113.1; 1906, 116.5; 1907, 122.6; 1908, 124.8; 1909, 129.0; 1910, 134.0; 1911, 137.9; 1912, 145.0; 1913, 148.9. This shows a higher rise than the unweighted average; the weights, however, are so arbitrary, that it is doubtful if importance is to be attached to the result. The weights follow: Agriculture, 20; Fishing, 2; Lumbering, 5; Mining, 5; Building, 14; Metal, 8; Woodworking, 4; Printing, 2; Clothing, 7; Textile, 3; Leather, 1; Brewing and Distilling,  $\frac{1}{2}$ ; Transportation, 8; Municipal,  $\frac{1}{2}$ ; Domestic Service, 20.

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<sup>1</sup> One indication of this lies in the fact that the numbers shew little effect of the reduction which, as hewn by the record of changes above, took place in 1908 and 1913, but which were largely confined to unskilled and "floating" workmen.

INDEX NUMBERS OF Rates of Wages, Canada, 1900-1913.

	Number of Returns.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
<b>I. Agriculture—</b>															
(a) Grain, stock, dairy and mixed farming.....	103	100.0	101.6	102.0	105.0	106.4	111.2	115.7	118.0	122.7	127.5	133.1	138.5	148.0	152.5
(b) Fruit Farming.....	30	100.0	103.3	103.3	104.8	109.7	113.8	114.8	118.7	123.8	127.2	134.0	138.9	141.0	144.8
All.....	133	100.0	102.0	102.6	106.0	107.1	111.8	115.5	118.2	122.9	127.4	133.3	138.6	146.4	150.7
II. Fishing and Fish Canning.....	23	100.0	100.7	101.5	101.5	104.8	108.3	108.3	109.5	112.6	115.7	123.0	126.0	131.6	136.0
<b>III. Lumbering and Sawmilling—</b>															
(a) Camps.....	34	100.0	100.6	101.7	104.0	104.5	106.9	107.3	111.5	115.6	120.3	123.2	125.5	132.8	132.2
(b) Drives.....	6	100.0	101.0	101.3	102.2	104.7	108.2	109.3	115.5	135.6	122.4	128.6	132.1	132.1	132.1
(c) Sawmills.....	14	100.0	100.0	100.0	102.0	98.8	100.3	107.6	109.3	111.5	114.9	120.0	120.1	119.5	119.6
(d) Shingle mills.....	4	100.0	100.0	104.5	106.1	106.1	106.1	107.1	113.2	113.2	115.2	115.2	115.2	115.2	113.2
All.....	58	100.0	100.4	101.6	103.6	103.4	105.3	107.6	111.5	114.8	118.9	122.5	124.2	128.3	129.2
<b>IV. Mines, Quarries and Smelters—</b>															
(a) Coal mines (underground and overground)....	70	100.0	108.7	109.3	109.1	109.8	110.8	107.3	117.0	117.4	118.0	122.6	124.3	126.5	127.0
(b) Metal.....	39	100.0	100.0	100.0	103.9	105.7	105.7	109.0	118.2	118.5	118.9	127.4	119.2	121.2	123.6
(c) Quarries.....	15	100.0	100.0	100.0	110.2	111.6	113.1	119.1	120.8	125.3	126.4	127.7	130.2	133.3	137.7
(d) Smelters.....	6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	106.0	106.0	108.0	113.9	117.6	117.6
All.....	130	100.0	105.2	106.2	107.2	108.2	109.0	108.5	117.2	117.8	118.1	121.0	122.6	125.0	123.8
V. Building.....	74	100.0	103.5	108.0	109.0	113.9	117.8	123.5	128.7	131.6	134.7	136.8	137.9	145.4	150.0
VI. Metal.....	115	100.0	101.6	103.7	104.9	108.5	110.1	112.6	115.8	118.4	121.8	123.3	128.0	131.9	135.3
<b>VII. Woodworking—</b>															
(a) Planing, sash and door.....	15	100.0	101.8	103.1	104.0	106.6	110.1	111.6	112.5	117.8	118.2	121.6	125.4	131.0	131.1
(b) Furniture.....	16	100.0	102.2	106.2	110.9	113.8	115.3	116.9	126.1	126.1	126.3	129.2	133.9	140.0	148.4
(c) Carriage and wagon.....	18	100.0	100.0	102.8	106.8	109.4	111.4	113.4	119.2	122.1	122.5	124.2	126.9	132.2	137.8
All.....	49	100.0	101.3	104.1	107.4	110.0	112.3	114.0	119.4	122.1	122.6	125.0	128.7	135.0	139.2
<b>VIII. Printing—</b>															
(a) Compositors.....	34	100.0	104.7	105.4	108.3	112.4	114.6	119.3	123.9	126.8	134.0	137.6	143.7	152.3	158.9
(b) Pressmen and stereotypers.....	31	100.0	100.3	101.2	104.1	110.4	112.1	113.2	122.3	128.8	127.4	135.0	138.5	144.2	150.2
(c) Binderies.....	25	100.0	100.7	103.9	108.4	112.4	115.1	116.4	118.1	125.9	127.1	130.1	138.4	145.3	148.3
All.....	90	100.0	102.0	103.5	106.9	111.7	113.9	117.0	121.7	127.2	129.8	134.6	140.5	147.6	152.4
<b>IX. Clothing—</b>															
(a) Tailors.....	52	100.0	101.9	103.9	105.7	107.9	115.8	116.6	118.5	118.9	126.0	130.6	135.3	138.1	141.5
(b) Ready-made clothing.....	25	100.0	100.5	103.4	105.5	108.8	110.2	115.0	118.1	141.2	149.2	152.0	152.0	176.0	179.9
(c) White wear.....	9	100.0	112.2	112.2	112.2	112.2	112.2	121.6	121.6	121.6	121.6	128.7	129.9	129.9	129.9
(d) Shirts.....	9	100.0	101.9	101.9	101.9	101.9	103.1	104.3	104.3	109.0	114.2	120.5	125.9	132.9	134.4
(e) Fur.....	15	100.0	104.8	109.6	117.4	122.7	126.9	132.3	139.3	147.0	158.7	161.6	168.3	174.3	178.1
(f) Boots and shoes.....	14	100.0	102.4	105.5	109.2	110.3	113.0	109.9	111.7	116.6	119.1	121.3	121.7	131.9	134.5
All.....	124	100.0	102.8	105.1	107.6	110.0	114.6	120.7	127.9	126.1	131.8	136.2	140.0	148.5	151.5
<b>X. Textile—</b>															
(a) Cotton.....	10	100.0	98.8	98.7	109.1	112.9	108.1	111.8	121.2	166.7	114.8	112.8	115.9	124.3	130.2
(b) Wollen and knitting.....	22	100.0	100.0	101.6	102.3	109.3	110.2	110.2	111.0	111.7	115.1	116.3	119.7	130.6	132.5
All.....	32	100.0	99.4	100.3	105.4	110.9	109.2	110.9	115.6	114.0	115.0	114.7	118.0	127.7	131.5
<b>XI. Leather, (tanneries, horse goods).....</b>															
	10	100.0	100.0	100.0	101.0	102.7	103.3	105.7	106.3	108.4	112.4	120.7	122.9	127.9	129.0

INDEX NUMBERS OF RATES OF WAGES, CANADA, 1900-1913—*Concluded.*

	Number of Returns.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.
XII. <i>Breweries and Distilleries</i> .....	26	100.0	100.4	100.9	103.7	104.4	108.8	109.5	111.4	111.8	116.2	120.6	122.6	126.8	132.2
XIII. <i>Transportation—</i>															
(a) <i>Steam railways</i> .....	27	100.0	100.2	102.9	107.3	107.6	110.5	112.4	118.4	119.4	119.4	134.6	135.6	140.8	146.6
(b) <i>Electric railways</i> .....	10	100.0	102.5	104.3	107.6	113.8	114.0	118.6	123.0	128.0	129.2	131.2	141.1	145.1	161.9
(c) <i>Longshoremen</i> .....	35	100.0	100.2	101.0	101.3	102.3	103.1	104.6	113.6	115.3	115.6	116.5	116.5	123.0	127.7
All .....	72	100.0	100.6	102.3	104.4	105.8	107.4	109.5	116.8	118.6	118.9	125.3	127.1	132.7	139.7
XIV. <i>Municipal Employees—</i>															
(a) <i>Police</i> .....	11	100.0	101.8	102.5	108.0	107.3	107.8	109.5	113.2	118.9	119.2	121.6	125.2	129.3	133.8
(b) <i>Fire department</i> .....	6	100.0	102.9	104.6	110.5	112.2	112.4	114.1	125.4	131.8	135.2	135.2	141.9	141.9	149.4
(c) <i>General</i> .....	25	100.0	100.0	103.1	104.6	108.7	110.9	113.4	118.3	119.2	121.4	124.9	130.6	134.7	142.3
All .....	42	100.0	100.9	103.2	104.6	108.8	110.4	112.6	118.0	121.0	122.7	125.6	130.8	134.4	141.1
XV. <i>Domestic Service.</i> .....	66	100.0	100.0	104.3	108.3	111.4	117.6	122.4	127.3	134.1	142.4	149.9	155.8	166.4	171.9
All .....	1,034	100.0	102.0	104.3	106.1	108.8	111.6	114.5	119.2	121.1	125.4	129.7	133.1	139.3	142.9



*Hours of Labour, 1900-1913.*—On the kindred subject of hours of labour, some equally interesting results are shown. The large table of wages and hours contains altogether 712 series of returns showing hours of labour from 1900 to 1913. Of these 461 show no change, while 239 show a decreasing tendency and only two an increase. The most important changes in hours in the table include 55 changes from 60 to 54 hours per week, 52 from 54 to 48, 21 from 60 to 48, 17 from 60 to 55, 13 from 52 to 49, 9 from 52 to 49, and 19 involving the 44 hour week. The table would appear to bear out the Departmental record of changes in indicating that the tendency was strongest between 1903 and 1907 and again during the past three years. While the statistics in this connection are subject to the limitations pointed out above in the case of wages they offer strong evidence of a considerable tendency towards a lessening of the duration of the working day.

This conclusion is in line with common knowledge. A prominent instance is the movement which the Typographical Union conducted in 1906 for an eight-hour day throughout the continent. In the building trades also the tendency has been strongly towards a shortening of hours, several classes having now obtained the eight-hour day over considerable areas, while several important localities have adopted either the nine-hour day or the eight-hour day in all branches of these trades. The movement has been especially pronounced in the western cities and in Toronto and a few other eastern centres. In Canada as a whole the instances in which more than ten hours a day constitute a day's work are exceptional.

The tendency illustrated by the above specific facts has been reflected in legislation, the provinces being the authority within whose jurisdiction the matter chiefly rests. Since 1900, four provinces have enacted factory legislation restricting the hours of employment for women, young girls and children. British Columbia has strengthened its legislation restricting hours in mines, and has enforced the eight-hour day in smelters. Alberta has adopted the eight-hour day in coal mines and Ontario in metal mines. Hours in bakery shops have been regulated in Ontario. Nova Scotia and Ontario have each legislated to regulate the hours of motormen and conductors, and in Quebec the hours of women and children in textile factories have been restricted. It is significant that within the decade a Royal Commission in Nova Scotia and a Select Committee of the Dominion House of Commons have taken evidence in connection with proposed enactments for an eight-hour day, though without legislative action following. "Fair Wage" policies have been adopted by the Dominion Government, by the Governments of eight provinces, and by over forty municipalities since 1900 in public works.

*Analysis of Increases by Provinces.*—The return is insufficiently broad to serve as the basis of an analysis of tendencies in each of the trades by provinces. The following, however, shows the number of series of quotations contained in the large table for each province and the average rate of increase shown in each in 1913 compared with 1900:—

	Number of series of quotations.	Index number 1913 (1900=100).
Nova Scotia.....	131	141.6
Prince Edward Island.....	42	158.7
New Brunswick.....	80	137.4
Quebec.....	202	148.3
Ontario.....	317	145.7
Manitoba.....	49	162.0
Saskatchewan.....	49	149.6
Alberta.....	51	139.0
British Columbia.....	104	127.6

Disregarding the high level shown for Prince Edward Island and Manitoba, (the result of a preponderance of agricultural and domestic labour in the returns) the rise has apparently been least in British Columbia, an indication of the fact that the "spread" between wages in British Columbia and Eastern Canada has tended to lessen during recent years.

Actual present wages statistics may be compared in the large table, where it will be seen that on the whole the level is lowest in rural Quebec and in the Maritime Provinces and highest west of the great lakes, culminating in British Columbia. Similarly in the matter of hours, the eight-hour day may be said to be the prevalent working day in British Columbia: outside of that province, however, it is restricted to localities or branches of trade: printers, for instance (members of typographical unions), have the eight-hour day throughout Canada, and the building trades have it throughout the West. In the East, however, only Toronto, Hamilton and a few other localities are prominent in this regard, the nine-hour and ten-hour day being commonly in force.

As in the case of Prices, it is important to note the level of the year (1900) since when the above advances have taken effect. No comprehensive data for earlier years exist, but there is reason to believe that wages did not decline as rapidly during the nineties as did prices.<sup>1</sup> Such, at any rate, was the experience in the United States where wages rates sagged only slightly between 1890 and 1900.<sup>2</sup> In Great Britain, wages fell in the seventies, rose in the eighties, remained steady until 1895, after which they rose.<sup>3</sup> In Germany, likewise, wages did not fall with the decline in prices of 1872-1888.<sup>4</sup> This, of course, makes the rapidity of the recent Canadian rise the more remarkable.

## WAGES AND COST OF LIVING—EARNINGS AND "REAL" WAGES.

Has there been a rise in "real" wages in Canada since 1900? In other words, have the earnings of the average workman increased in greater proportion than the cost of living?<sup>5</sup>

*Unemployment.*—On one point absolutely necessary, as already remarked, for an answer, namely, unemployment, statistics are lacking. In a general way it is known that, except during intervals in 1903-1904 and 1907-1908, and the past year, employment has been uniformly very active, and that unemployment long continued or on any

<sup>1</sup> Records in the Department of Labour show several increases in skilled trades during the 'nineties.

<sup>2</sup> See p. 531.

<sup>3</sup> See p. 527.

<sup>4</sup> See Report of Royal Commission on Gold and Silver—evidence of Professors Nasse and Lexis.

<sup>5</sup> "When comparisons are made between the economic conditions of groups of different countries, districts, trades, or periods, it is useless to regard simply the *nominal* wages. This is most evident when a great interval of time is taken; thus a hind's annual (nominal) earnings in the 13th century were valued at 35s. 8d. (Thorold Rogers, *Six Centuries of Work and Wages*, p. 170); now those of an agricultural labourer may be taken as about £40; and it is difficult to suppose that this ratio, 1.22, in any way measures their relative well-being. Hence, comparison of nominal wages is, at any rate in extreme cases, futile." *Dictionary of Political Economy Art Wages*.

"According to Walker "real wages are the remuneration of the hired labourer as reduced to the necessities, comforts, or luxuries of life," and they differ from nominal by reason of (I) variations in the purchase power of money; (II) variations in form of payment; (III) opportunities for extra earnings; (IV) greater or less regularity of employment; (V) longer or shorter duration of the labour power." On this definition see Marshall, *Principles of Economics*, ed. 1895, pp. 629-635.

extensive scale has been practically nonexistent. No statistical measurement, however, of these conditions from year to year is possible.<sup>1</sup>

*Division of Labour.*—Another factor is the tendency more or less constant to greater division of labour. In the larger manufacturing establishments (the growth in the number of which has been marked during the past decade)<sup>2</sup> a relatively greater proportion of low skilled or merely dexterous workmen is noticable. No accurate measurement of the drift in this direction is available.<sup>3</sup>

<sup>1</sup> Except indirectly by means of the statistics of production, construction, etc., which appear in Volume II.

Discussing the question of unemployment as normally affecting wages in the United States, Scott Nearing (*Wages in the United States*, p. 199) says:

For the unionized trades of New York State, for the coal industry of the United States, and by inference for the other industries of the United States, we may draw these conclusions,—

- A. Unemployment is always a factor in modern industry.
- B. The average miner can work, from year to year, about two-thirds of the time.
- C. In other industries, the average unemployment from year to year is almost one-fifth.
- D. In some years the unemployment is several times more severe than in others."

The causes of unemployment he classifies thus (Chap. X):—

"(1) Personal causes,—

- "a. Malnutrition,
- "b. Sickness,
- "c. Accident,
- "d. Inefficiency,

"(2) Industrial causes,—

- "a. Seasonal trades,
- "b. Industrial crises,
- "c. Labour troubles,
- "d. Lack of stock or transportation facilities,
- "e. Casual trades."

The comparatively severe winter season in Canada increases to a considerable degree the amount of idleness in out-door occupations during four months of the year.

It may be interesting to add that a recent New York investigation (*Standard of Living among Workmen's Families in New York City*, by Robert C. Chapin, 1909) concludes with the statement that a man, wife and three children under fourteen cannot live and maintain efficiency on Manhattan Island for less than nine hundred dollars per year. This is considered a fair average for the great cities east of the Mississippi and north of Virginia. With regard to Canada, note budgets, p. 9.

<sup>2</sup> In 1900 the number of manufacturing establishments in Canada was 14,650 and the number of employees 339,173, an average of 23; in 1910 the number of establishments was 19,218 and the number of employees 515,203, an average of 27.

<sup>3</sup> Scott Nearing (*Wages in the United States*, Chap. IX) has analyzed existing statistics in the United States in order to ascertain how far this "stratification" of labour has gone. He concludes that less than ten per cent of adult male wage earners in the United States receive over \$1,000 annually, forty per cent from \$600 to \$1,000, and fifty per cent (unskilled) less than \$600 a year.

After an exhaustive survey of the more recent wage statistics of the United States,—Frank Hatch Straightoff, M.A. (*The Distribution of Incomes in the United States*) concludes that "it is reasonable to believe that in 1904, something over sixty per cent of the males at least sixteen years of age, employed in manufacturing, mining, trade, transportation, and a few other occupations associated with industrial life, were earning less than \$626 per annum, about thirty per cent were receiving \$626 but under \$1,044, and perhaps ten per cent enjoyed labour incomes of at least \$1,000. If to these the agriculturists are added, sixty-five per cent fall in the lowest earnings group, twenty-seven in the medium, and eight in the high. Suppose all the men engaged in gainful occupations in 1904, but unaccounted for in this estimate, to have been paid \$12 per week or more. This is manifestly impossible, yet, even upon such an assumption, fully one-half of the adult males engaged in remunerative labour were rewarded in that year with less than \$626" (p. 139). Mr. Bowley commenting on this (*Economic Journal*, XXIII, 426) says: "Put otherwise, the median wage in 1904 in U.S.A. was less than \$12 per week; against this we may say with more definite evidence that the median weekly wage at the same date in the United Kingdom was rather below \$7."



*Earnings.*—On the subject of "earnings," comprehensive statistics which would sum up the effects of the above-mentioned and other factors are lacking.<sup>1</sup> The Census office issued in 1907 a bulletin on "Wage Earners by Occupation" which gave the average earnings of male and female wage earners by occupations as disclosed by the Census of 1901. As the similar compilation based on the 1911 Census is not yet available no light is thrown from this source on conditions in recent years.

The census of manufacturers for 1900 set down the total number of employees at 339,173 and their total wages at \$113,249,350. The similar census for 1910 gave the number of employees at 515,203 and their wages as \$241,008,467. This represents a growth in average earnings from \$333 to \$420 during the decade or 40 per cent.

The annual reports of the Comptroller of Railway Statistics give since 1907 the "average daily compensation" of employees, the figures to date being as follows:—

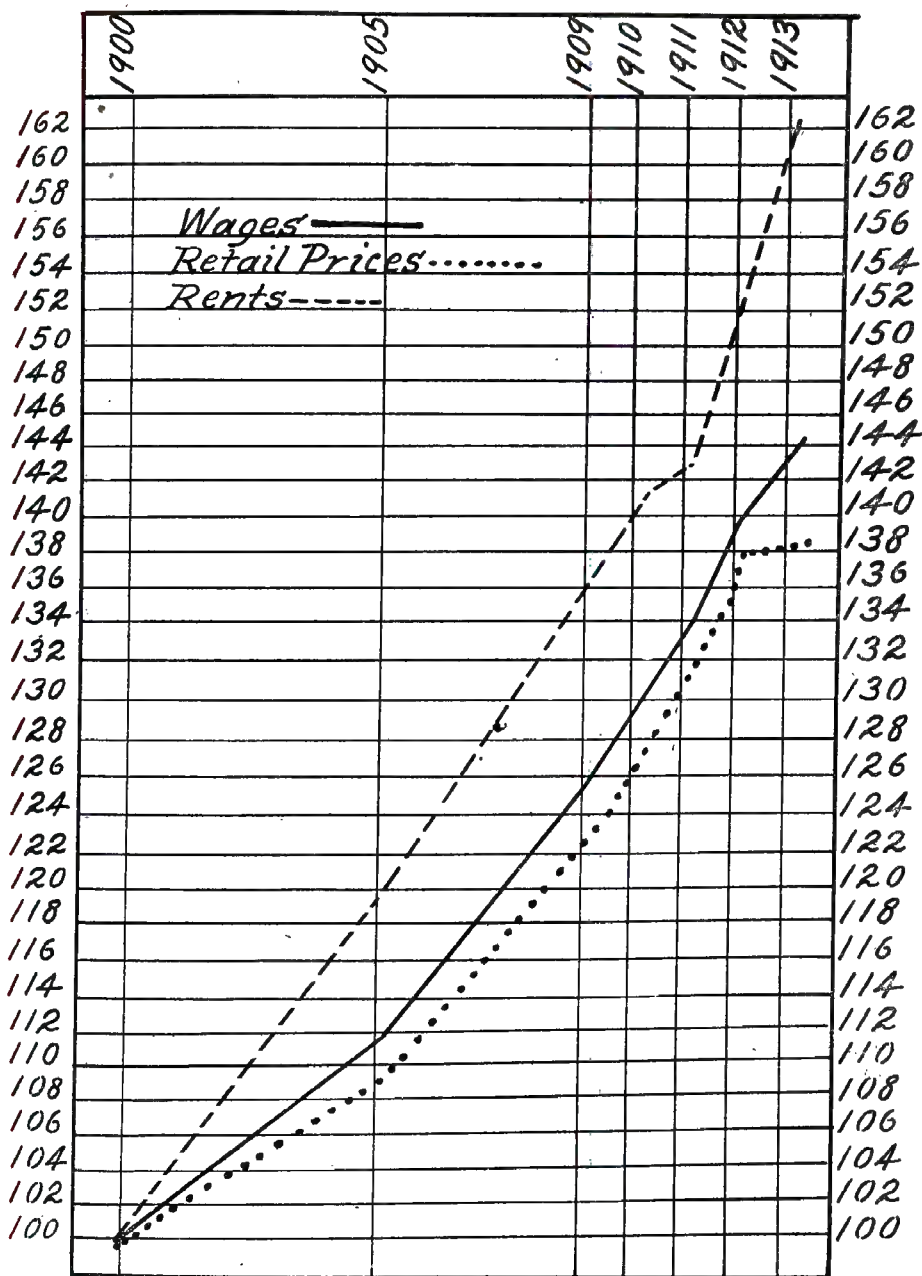
Employees.	1907.	1908.	1909	1910.	1911.	1912.	1913.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
General officers.....	11 74	11 59	11 73	10 72	11 72	12 47	12 96
Other officers.....	4 11	4 63	4 59	4 73	4 84	4 92	5 00
General office clerks.....	1 70	1 81	1 81	1 94	1 98	1 99	2 03
Station agents.....	1 91	2 04	2 09	2 16	2 28	2 39	2 60
Other stationmen.....	1 56	1 71	1 65	1 65	1 73	1 77	1 90
Enginemen.....	3 89	4 53	4 13	4 12	4 40	4 64	4 86
Firemen.....	2 42	2 50	2 52	2 53	2 78	2 84	3 02
Conductors.....	3 20	3 30	3 31	3 30	3 62	3 69	3 85
Other trainmen.....	1 92	2 06	2 13	2 12	2 44	2 44	2 66
Machinists.....	2 41	2 68	2 89	2 98	3 14	3 34	3 51
Carpenters.....	2 99	2 19	2 23	2 52	2 44	2 58	2 75
Other shopmen.....	1 99	2 16	2 33	2 19	2 22	2 33	2 42
Section foremen.....	2 06	2 25	2 15	2 18	2 32	2 38	2 50
Other trackmen.....	1 45	1 57	1 59	1 58	1 66	1 77	1 83
Telegraph operators.....	1 88	2 07	2 09	2 20	2 28	2 28	2 51
Employees-floating equipment.....	1 18	1 10	1 26	2 19	1 11	1 22	1 26
All other employees.....	1 81	1 87	1 95	1 95	1 87	1 84	1 82
Average.....	2 83	2 91	2 97	3 00	3 10	3 23	3 38
Index number (1907=100).....	100.0	103.8	104.6	105.9	109.5	114.0	119.0

The best that is possible by way of illustrating the course of real wages, is to chart the lines of prices, rentals and rates of wages in juxtaposition, as in the accompanying diagram where the heavy line shows the course of wages, the light line that of retail prices and the dotted line that of rentals. As they stand, the wages of the classes covered in the present review—which it should again be pointed out are rather preponderatingly composed of skilled or abnormally affected classes—have gone up somewhat faster than retail prices of food and fuel, but not so fast as rentals of dwellings. The line of "real" wages would be on this showing practically horizontal;<sup>2</sup> if unem-

<sup>1</sup> Average earnings are, of course, of limited interest from the standpoint of the individual. As Sidgwick remarks (Principles Bk. II, Chap. IX): "In examining how the remuneration of labour taken in the aggregate tends to be determined, we have been inevitably led to take note of the differences which normally subsist, even where competition is legally quite open, between the wages of different branches of industry. As has already been observed, it is this latter question which is most interesting to any particular labourer: the variations in an average found by dividing the aggregate of workers' remuneration among the aggregate of workers do not practically concern him, except so far as he may infer from them the variations in the wages that he may himself expect. It might be added that even the average rate of earnings in his own industry only concerns him indirectly, unless he is conscious of being an average worker. There is hardly any branch of industry in which a labourer stronger, more industrious, more skilful, or more careful than his fellows is not likely in one way or another to obtain more than the average rate of remuneration."

<sup>2</sup> Regarding rent as constituting twenty per cent of the family budget, the index numbers for rent and prices combined would be: 1900, 100; 1905, 110.0; 1909, 125.0; 1910, 129.9; 1911, 133.8; 1912, 140.9; 1913, 142.9; which are almost identical with those of nominal wages.

WAGES, RETAIL PRICES AND RENTS, CANADA, 1900-1913.





ployment were reckoned in, however, there would be a sagging tendency in 1908 and a drop, just how pronounced it is impossible to say, in 1913-14. In certain instances, labour has clearly maintained its place in the prevailing rise; in others, including low-grade factory help, this is by no means certain.<sup>1</sup>

## WAGES AND COST OF PRODUCTION—WAGES AND PRICES.

Associated with the question of real wages, or wages from the standpoint of labour, is the question of wages from the standpoint of capital as affecting cost of production, and from the standpoint of the general consumer as affecting prices through cost of production. As already remarked, the assertion is frequent that the rise in prices is largely to be accounted for by the rise in wages.

The manner in which wages affect prices is usually explained as follows: Labour, having by organization increased its strength, compels, by means of a strike or a threatened strike, an advance in wages. This enables the workman to advance his standard of living and thus increase the general demand for goods. At the same time, the employer who conceded the demand recoups himself by a rise in the price of his product. If this has occurred on a general scale, labour as a consumer feels the effect on cost of living and the rise becomes the basis for a further demand for increased wages, and so on, wages and prices pursuing each other in an ascending spiral.

In examining this it will be of interest to present, first, the facts with regard to the growth of trades unionism in recent years and the prevalence of strikes in Canada:

*Labour Organizations and Strikes.*—The growth in trade unionism in Canada has been made the subject of statistical measurement only since 1911 when the first annual report of the Department of Labour on the question was issued. The record is as follows:—

Year.	Number of Unions.	Total members.
1911.	1,741	133,132
1912.	1,883	160,120
1913.	2,017	175,799

The earlier progress of the movement, however, may be illustrated by the record of the Trades and Labour Congress. Organized labour in Canada is for the most part affiliated with the similar movement in the United States, the "International" unions in Canada numbering 1,792 with a membership of 149,577, of a total of 2,017 with a membership of 175,799. The "Trades and Labour Congress" is the chief central international labour body in Canada, and though its growth reflects an increase in its representative character within the international movement itself as well as the general progress, the following statistics since 1900 are noteworthy:—

<sup>1</sup> The subject of real wages is further dealt with below (pp. 520-526) and under the heading "Tendencies in Wages and Hours in Other Countries (pp. 527-544). Real wages would appear to have remained about the same in Australia, but to have declined in England.

## PROGRESS OF THE TRADES AND LABOUR CONGRESS, 1901-1913.

Year.	Membership.	Receipts.	Expenditures.
		\$ cts.	\$ cts.
1901.....	8,381	1,009 88	908 00
1902.....	13,465	2,342 41	1,795 57
1903.....	16,108	3,858 34	3,363 38
1904.....	22,010	3,747 96	3,346 29
1905.....	22,004	4,700 29	4,001 36
1906.....	27,676	5,717 40	3,970 08
1907.....	32,395	7,474 79	6,570 26
1908.....	40,728	8,904 44	7,442 09
1909.....	36,071	7,899 17	6,667 74
1910.....	51,000	9,482 34	7,103 56
1911.....	57,259	12,454 33	9,139 64
1912.....	66,128	16,699 79	10,219 82
1913.....	80,801	19,871 49	10,475 44

The American Federation of Labour which is the supreme federal head of the international movement on the continent has shown the following growth:—

## PROGRESS OF THE AMERICAN FEDERATION OF LABOUR.

Year.	Membership.	Year.	Membership.	Year.	Membership.
1901.....	787,537	1906.....	1,454,200	1910.....	1,562,112
1902.....	1,024,399	1907.....	1,538,970	1911.....	1,761,835
1903.....	1,365,800	1908.....	1,586,885	1912.....	1,841,268
1904.....	1,676,200	1909.....	1,482,872	1913.....	1,996,004
1905.....	1,494,300				

The record of strikes and lock-outs follows:

Year.	Disputes, Number.	Number Establishments concerned.	Number Employees Affected.	Approximate time Losses in working days.
1901.....	104	273	28,086	632,311
1902.....	121	420	12,264	120,940
1903.....	146	927	50,041	1,226,500
1904.....	99	575	16,482	265,004
1905.....	89	437	16,223	217,244
1906.....	141	1,015	26,050	350,707
1907.....	149	825	36,224	621,962
1908.....	68	175	25,293	708,285
1909.....	69	397	17,332	871,845
1910.....	84	1,335	21,280	718,635
1911.....	99	475	30,094	2,046,650
1912.....	150	989	40,511	1,099,208
1913.....	113	1,015	39,536	1,287,678
Total .....	1,432	8,858	359,416	10,176,059

It will be seen that direct relationship between the strength of unionism, the prevalence of strikes and the general movement of wages is difficult to establish.

*Wages and Cost of Production.*—The only comprehensive data for Canada on the relation of wages to cost of production are those of the Census of Manufactures, showing capital invested in manufacturing plants, number of employees, their total wages, the value of raw and partly manufactured materials entering into production, and the value of the finished product:

Year.	Capital (value of plants).	Number of employees.	Wages.	Value of raw and partly manu- factured articles.	Value of Products.
1900. ....	446,916,487	339,173	113,249,350	266,527,858	481,053,375
1905. ....	846,585,023	392,530	165,106,011	.....	718,352,603
1910. ....	1,247,583,609	515,203	241,008,418	601,509,018	1,165,975,739

According to the above, average earnings in manufacturing establishments advanced from \$333 in 1900 to \$420 in 1905 and to \$467 in 1910, a rise in the decade of forty per cent. Proportionately, however, to the value of the finished product, the wages bill has been decreasing. In 1900 it was 23.5 per cent; in 1905, 22.9 per cent; and in 1910 only 20.6 per cent. The similar ratio of raw materials to finished product also has declined, from 55.4 per cent in 1900 to 51.6 per cent in 1910. It would appear that, notwithstanding the higher wages paid to the average workman and the higher costs of raw material, the relative "spread" between total costs of production (wages and raw materials) and the value of the finished product has been increasing. In 1900 the "spread" was 21.1 per cent of the product; in 1910 it was 27.4 per cent. Confirmation of this is obtained by working out the relation of these margins to actual capital. In 1900 the margin was 22.8 per cent; this had grown to 25.9 per cent in 1910. These figures, of course, do not include such costs as rent of land, insurance, etc.

From the wages statistics of the present review it is impossible to trace the connection of the rise in wages and the rise in prices. Thus the wages of farm labour have gone up fifty per cent since 1900 but the prices of products of the farm are up considerably more. Lumbermen's wages have advanced about 30 per cent while the price of lumber has gone up 56 per cent. On the other hand, furniture factory employees have secured raises amounting to 48 per cent while the price of furniture has advanced only about half that much. The entire rise in wages in the manufacturing industry, 40 per cent, compared with a rise of about 30 per cent in the prices of manufactured products. The insufficiency of such statements, however, is shown by the fact that in many cases the same labour produces commodities whose prices have fluctuated in an entirely different manner. Thus the recent great rise in meats has taken place concurrently with a drop in grains though both are the product of farm labour. Flour has advanced very moderately compared with bran and shorts, though both are made in the same establishment. The comparatively low rise of furniture prices possibly reflects improvement in manufacturing processes. The connection between labour organization and advancing wages does not account for the rise in domestic service and farm labour, the least organized and the least class-conscious groups of the list.

But the deductive refutation of the suggestion that wages are the cause of prices is perhaps more telling: First, it has been pointed out that the same argument can be made by starting at almost any point on the circle. This has been illustrated<sup>1</sup> by the example of a monopoly raising prices:

"Under the protection of a tariff a number of the trusts are formed which raise the price of their products above the level in the open market; the rise of prices raises the cost of living, produces unrest among the working classes, and eventually a rise of

<sup>1</sup> Layton, "Introduction to the Study of Prices," p. 129.

wages; the increase in the wages-bill cuts into anticipated profits of the trusts, which on the score of increased costs of production attempt to raise prices still further, and probably demand a higher tariff. If this is secured the whole process begins again, and, just as when the rise started in wages, seems to involve an indefinite upward movement of prices."

In general, it is the experience that wages follow rather than lead prices upward in times of buoyancy and expansion, and similarly that they tend to remain up in times of trade depression when prices are falling. The low curve of prices in 1896-7 was not paralleled by wages, and from observation of the general industrial situation in the opening years of the present century it would appear that the trade boom was well under way before labour was able materially to better its position. It is possible to trace in the *Labour Gazette* a gradual change from the plea of "good times" to one of "cost of living" as the basis of demands for higher wages, though the two were intermingled from the outset by the fact that the lead in the price rise was taken by the common foods. Thus, as pointed out above, the great rise of 1903 was a rise essentially among unorganized small groups, while the other great rise, that of 1907, was exactly the reverse. It is an assertion frequently made, in fact, that the large profits of good times depend on the assumption that wages move more slowly than prices and thus enable a profit to be reaped in the early stages and that it is the higher prices that enable the advance in wages to be granted.<sup>1</sup>

<sup>1</sup> "That wages go up more slowly than prices is one of the best attested facts in economic history. It is mainly due to the force of custom.... Of the fact there can be no question; when prices rise, the wages of hired workers do not rise as fast.... It is familiar experience that those business men gain most in periods of rising prices whose operations involve in largest degree the payment of wages.... The manufacturer who buys few materials and whose expenses are chiefly in the direct purchase of labour, profits most of all"—(Tausig, "Principles of Economics," Vol. 1, p. 304).

"Wages rise less rapidly than prices of commodities. From this cause rising prices favour employers' profits. As employers, more generally than wage-earners, are accumulators, the growth of capital is thus favoured. The growth of capital in its turn favours extended trade, increases the demand for labour, and raises wages within profitable limits." (Prideaux Selby, Letter to Gold and Silver Commission, Third Report, p. 428). See also Tooke, "History of Prices," III, p. 52; Layton, "Introduction to the Study of Prices," pp. 10-12; etc.

Price, however, ("Money and its Relation to Prices," Chap. II) points out one source of advantage to the labourer in rising prices: "It may be plausibly contended that in the case of a rise, although his wages may not respond at once to changes in prices, and for the time he may lose, yet the general air of prosperity, which accompanies the rise, and the encouragement, which it affords to the employer, are not unlikely to enable the workman to insist more easily on better terms, and to make the employer more ready to respond to a demand for an advance in wages; and that with more rapidity than in the opposite case of a fall of prices the readjustment will be effected. In short, the accompanying friction and irritation are likely, it may be argued, to be less protracted and extensive in the case of a rise than in that of a fall of prices." But see Cairnes, "Essays," p. 6 and pp. 147-9.

Professor Mitchell may be quoted ("Business Cycles," p. 465-6) as an observer writing with the present situation immediately in view: "Both the American and the British statistics confirm the prevailing opinion that in times of business revival the prices of labour rise less than the prices of commodities at wholesale..... Less well known is the fact that the advance often begins sooner in the labour than in the commodity markets. Yet both in the United States and in Great Britain wages began to rise after the depression of the middle 'nineties before wholesale prices had touched their lowest point..... The crisis of 1903-04 was not sufficiently severe in America to cause a reduction of wages..... In England the crisis of 1900 was followed by wage-reductions, and in the later revival wholesale prices advanced not only farther but also earlier than the prices of labour.

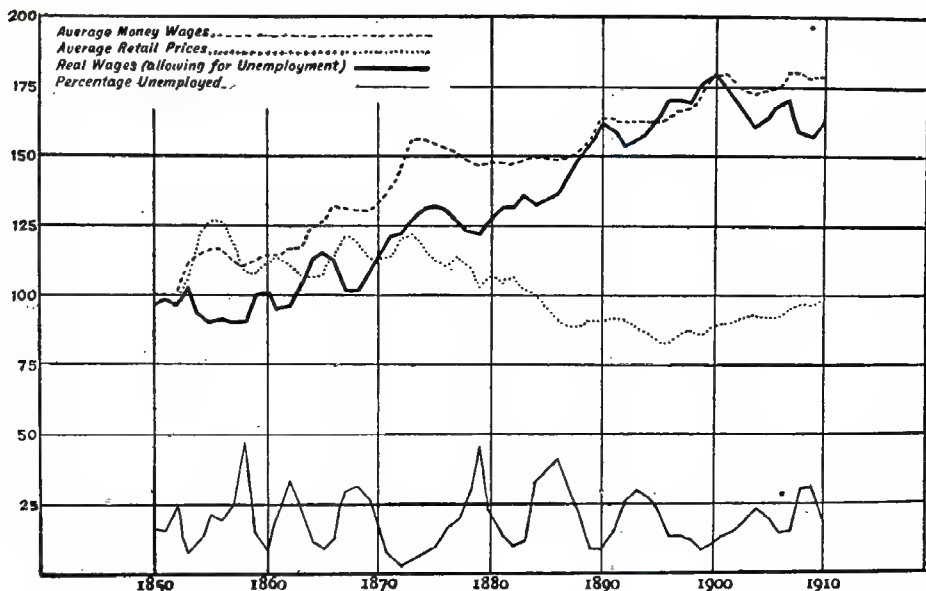
"The reason why wages rise less than wholesale prices is found principally in the unlike organization of the labour and commodity markets. Where trade unions are non-existent or weak the individual labourers have neither the prompt knowledge of changes in business conditions necessary to determine what employers can afford to pay for labour, nor the power to enforce such demands as are not readily conceded..... But many unions seek to make wage-contracts running for a considerable time and binding the men not to ask for fresh advances until the contracts have expired. Most important of all, the individual working-man, the trade union and the employer are much more under the dominion of the idea of a just price than are the business men dealing in commodities. This survival from the relatively stable economic life of the middle ages has almost ceased to influence the prices men offer or accept for cotton, wheat, or iron;—such commodities 'are worth what they will bring.' But there still persists in the minds of all the parties in the labour market certain notions of what is a proper wage for a day's labour. When the employer offers much less than the customary price, he arouses stubborn resistance which is reinforced by the whole community's common sense that the work is



It is probably true that labour in many countries is, as a result of the rapid increase in wealth gradually obtaining a larger share of products not only absolutely but relatively.<sup>1</sup> Capital regards this tendency on the whole not so much as the sign of high cost of production as a sign of increased productive power.<sup>2</sup> In a rapidly expanding country like Canada, at a time when the demand for labour is very great, the accentuation of this process is to be expected, especially while the existence of free land enables the employee to force a minimum wage equal to what he can produce from the soil.

worth more, or that a man cannot support his family decently on such a sum. On the other hand, when working-men ask much more than the customary prices, their pretensions strike others as absurd. Of course, such feelings impede the free working of supply and demand in the labour market—or rather constitute an important feature of both supply-price and demand-price—and tend to keep wages more stable than are prices in markets where pecuniary motives have unrestricted sway. . . . . It must also be said that the economic pressure which drives the great mass of wage-earners to sustain their arduous struggles for higher wages relaxes just at

#### MONEY WAGES, REAL WAGES, RETAIL PRICES, AND UNEMPLOYMENT (G. H. Wood)



the time when rapid increases might be wrung from employers. The relatively moderate rate at which retail prices rise in the earlier stages of revival prevents the cost of living from going up fast. On the other hand, the economic position of working-men is being improved by the greater regularity of employment and the abolition of "short time." Even without any increase in their rates of pay the wage-earning class is better off. They hesitate to demand an increase of their customary wages until the feeling of this relative prosperity is dulled by familiarity, until the cost of living has advanced seriously, and until personal savings or trade-union accumulations have put them in position to fight with vigour."

<sup>1</sup> "The broad tendency or progress in the modern world inclines to an alteration in the distribution of wealth in favour of the workmen, and to an advance of wages." (L. Price, "Money in Relation to Prices," Chap. VI.) Sir Robert Giffen in 1883 estimated the progress of the working-class as fifty per cent in the preceding fifty years. ("Essays in Finance," Second Series, p. 365.) Giffen's investigations have been superseded by Mr. Bowley's in 1904 and Mr. G. H. Wood's in 1909. Mr. Wood's chart (Journal of the Royal Statistical Society, March, 1909) is reproduced on the following page.

#### NOTE ON THE THEORY OF WAGES.

The bearing of particular phases of the wages and hours problem is more easily grasped with the general theory of wages and its development in view.

Before Adam Smith the subject of wages was hardly touched: as a rule wages were held to depend on the price of food. Adam Smith, noticing that with the division of labour the relations of productive effort and its reward had become indirect and prolonged in time, laid it down that wages are paid out of capital and tend to a minimum. Malthus



added little to this doctrine, but by fastening attention on the standard of living as determined by population, emphasized the dependence of wages on capital. After passing through the hands of Ricardo and James Mill, the so-called "wage fund" theory became for fifty years the accepted doctrine of economists, receiving its final and orthodox form from John Stuart Mill. Wages according to Mill were a matter of the division among the existing number of labourers of a certain fund whose magnitude is fixed. In other words, they depended on the ratio between population and capital. The most extreme statement of this theory is, perhaps, that of Lasalle that "by an iron and inexorable law,..... under the domination of supply and demand, the average wages of labour remain always reduced to the bare subsistence which according to the standard of living of a nation is necessary for maintenance and reproduction." To the prevalence of this doctrine may be attributed the unpopularity of political economy with the working classes of 1820-70. For, as was pointed out (Dic. Polit. Econ. art. Wages), "If the teaching of political economy on the subject of wages were true, any attempt that the working class might make to gain better terms was foredoomed to failure, or if successful would but benefit one particular section at the expense of the rest." In point of fact, however, the final promulgation of the theory by Mill was the precursor of its overthrow. The rigidity of the wages fund was almost immediately assailed by Longe and Thornton, to whom Mill himself surrendered, and later by Sidgwick and Walker, who denied that wages bear any relationship to capital, but are paid out of current production. Walker added the theory that of the four main destinations for the products of industry—namely, rent, profits, interest and wages—the first three are fixed by economic considerations independent of production, while labour is "the residual claimant to the products of industry."

At the present time it may be said that the untenableness of the wage-fund theory is admitted, but that no equally clear-cut doctrine has taken its place. The relation of population to capital is regarded as only one factor in the fixing of wages. Walker's "residuum" theory has been challenged, and instead wages are held to be "a varying proportion of a varying product of industry," as, in fact, are rent, interest and profits. That wages are *entirely* dependent on the productivity of labour is questioned, though a very close relationship has been proved to exist. The Austrian school has in this, as in so many branches of economics, coloured thought of the day with the view that wages, or the price of labour, depend on the "final utility" of labour, i.e., the part that can be most easily dispensed with.

Marshall's summing up ("Economics of Industry," Book VI, Chap. XIII) may be paraphrased: Labour and capital together produce the "national dividend." It is evident that unless this dividend is increased neither capital nor labour can get more except at the expense of each other. There is a fixed limit to the latter process in the vanishing of profits (the employer not being able to dictate prices beyond a certain limit) or the starving of the labourer. It follows therefore that unless higher wages spell increased efficiency there will be ultimately a drain upon industry and the labouring classes as a whole. Similarly the lowering of wages will not permanently benefit the employer if it results in the deterioration of labour. In the case of reductions in hours, if the process goes beyond the point of providing needed rest and leisure it is not in the interest of *all* labour. The theory that the lessening of hours raises wages is a fallacy, (based on the mistaken assumptions,—1, that there is a permanent work fund, and, 2, that all trades can benefit by a procedure which may benefit one trade at the expense of others,) though it may be that the wider interest of society calls for the change at the expense of production. The point between the above limits of high and low can be decided only by higgling and bargaining.

Some years ago Mr. Keir Hardy, in giving evidence before the British Labour Commission, quoted three pounds a week as a proper labour wage for miners and added, "I believe wages should be determined by the standard of living. If you improve the conditions of the man you make a higher wage necessary." To this William Smart ("Studies in Economics") replies that to the extent that the standard of comfort is a factor and a powerful one in affecting the supply of labour the above doctrine is true. It is not true, however, he contends, that the labourer may demand any standard and by holding out receive it, wages being fixed by negotiations and what the traffic will bear.

On the difficulty of tracing connection between changes in wages and hours and cost of production Marshall says: "We must distrust all attempts to solve the question, whether a reduction of the hours of labour reduces production and wages, by a simple appeal to facts. For whether we watch the statistics of wages and production immediately after the change or for a long period following it, the facts which we observe are likely to be due chiefly to causes other than that which we are wishing to study. Firstly, the effects which immediately follow are likely to be misleading for many reasons. If the reduction was made as a result of a successful strike, the chances are that the occasion chosen for the strike was one when the strategical position of the workmen was good, and when the general conditions of trade would have enabled them to obtain a rise of wages if there had been no change in the hours of labour; and therefore the immediate effects of the change on wages are likely to appear more favourable than they really were. And again many employers, having entered into contracts which they are bound to fulfil, may for the time offer higher wages for a short day than before for a long day; but this is a result of the suddenness of the change, and is a mere flash in the pan. On the other hand, if men have been overworked, the shortening of the hours of labour will not at once make them strong: the physical and moral improvement of the condition of the workers, with its consequent increase of efficiency and therefore of wages, cannot show itself at once. And secondly, the statistics of production and wages several years after the reduction of hours are likely to reflect changes in the prosperity of the country,

or of the trade in question, or of the methods of production, or lastly of the purchasing power of money; and it may be as difficult to isolate the effects of reduction of the hours of labour as it is to isolate the effects on the waves of a noisy sea caused by throwing a stone among them. For instance, when we look at the history of the introduction of the eight-hours day in Australia we find great fluctuations in the prosperity of the mines and the supply of gold, in the prosperity of the sheep farms and the price of wool, in the borrowing from old countries capital with which to employ Australian labour to build railways, etc., in immigration, and in commercial credit. And all these have been such powerful causes of change in the condition of the Australian working-man as to completely overlay and hide from view the effects of a reduction of the hours of labour from ten gross to eight net."

On the effect of the gold supply on Wages, see Newmarch, VI, pp. 204-13.

<sup>2</sup> Cairnes ("Essays") on this point is classic: "The rate of wages, whether measured in money or in the real remuneration of the labourer, affords an approximate criterion of the cost of production,.....but in a sense the inverse of that in which it is understood..... In other words, a high rate of wages indicates not a high, but a low cost of production, for all commodities measured in which the rate of wages is high; as on the other hand a low rate of wages indicates a high cost for all commodities measured in which the rate is low..... Capitalists and labourers receive large remuneration in America because their industry produces largely.... That is the simple and patent fact which all must acknowledge..... the high scale of industrial remuneration of America, instead of being evidence of a high cost of production in that country is distinctly evidence of a low cost of production; that is to say, in the first place of gold, and, in the next, of commodities which mainly constitute the real wages of labour—a description which embraces at once the most important raw materials of industry and the most important articles of general consumption. As regards commodities not included in this description, the criterion of wages stands in no constant relation of any kind to their cost..... Perhaps I shall here be asked how, if the case be so, the fact is to be explained..... that the people of the United States are unable to compete in neutral markets, in the scale of certain important wares, with England and other European countries..... How happens it, that, enjoying industrial advantages superior to other countries, they are yet unable to hold their own against them in the general markets of commerce? I shall endeavour to meet this objection fairly, and in the first place let me state what my contention is with regard to the cost of production in America. I do not contend that it is low in the case of all commodities capable of being produced in the country, but only in that of a large, very important, but still limited group. With regard to commodities lying outside this group, I hold that the rate of wages is simply no evidence as to the cost of their production, one way or the other."

See also "The Economy of High Wages" by J. Schoenhof, 1893.

The diverse effects of increased remuneration on the labourers' efficiency are well illustrated by the following passages from Lord Brassey's "Work and Wages," c. III:—

"At the commencement of the construction of the North Devon Railway, the wages of the labourers were 2s. a day. During the progress of the work their wages were raised to 2s. 6d. and 3s. a day. Nevertheless, it was found that the work was executed more cheaply when the men were earning the higher rate of wage than when they were paid at the lower rate. Again, in London, in carrying out a part of the Metropolitan Drainage Works in Oxford Stret, the wages of the bricklayers were gradually raised from 6s. to 10s. a day; yet it was found that the brickwork was constructed at a cheaper rate per cubic yard, after the wages of the workmen had been raised to 10s., than when they were paid at the rate of 6s. a day.

"On the railways of India it has been found that the great increase of pay which has taken place has neither augmented the rapidity of execution, nor added to the comfort of the labourer. The Hindoo workman knows no other want than his daily portion of rice, and the torrid climate renders watertight habitations and ample clothing alike unnecessary. The labourer, therefore, desists from work as soon as he has provided for the necessities of the day. Higher pay adds nothing to his comforts; it serves but to diminish his ordinary industry."

## CHAPTER II.

## WAGES AND HOURS IN OTHER COUNTRIES, 1900-1913.

It will be of interest to note, as in the case of prices and rentals, the recent tendency of wages in the countries more closely associated with the Dominion. Some significant features in the recent wages statistics of the United Kingdom, the United States, and Australia are briefly set out below.

Though a tendency upward has been general, the rise would appear more pronounced in Canada and the United States than in the other countries. In the United Kingdom it has been slight—less than 3 per cent, according to the Board of Trade, variously distributed as to trades. In Australia the rise has been about 25 per cent.

All index numbers have been "translated" to the base 1900.

## THE UNITED KINGDOM.

The Labour Department of the Board of Trade issues annual reports on (1) Standard Time Rates of Wages as at January 1, and (2) Changes in Rates of Wages and Hours of Labour. An index number of wages in the building trades, coal mining, textile factories and agriculture has been compiled back to 1897 as follows:—

## GENERAL COURSE OF WAGES IN THE UNITED KINGDOM, 1890-1910.

NOTE.—In the following table the wages at the end of 1900 are represented as 100. Years in which wages were higher or lower than in 1900 are represented by percentages correspondingly above or below 1900.

End of Year.	Building Trades (Bricklayers, Carpenters, Joiners, and Masons). (Mean of 74 Rates.)	Coal Mining (Hewers). Weighted percentage changes in principal districts.	Engineering (Fitters, Turners, Iron-founders and Pattern-makers). (Mean of 36 Rates.)	Textile (Cotton Spinners and Weavers, and linen and jute operatives).	Agriculture (Ordinary Labourers). (Mean of 115 Rates.)	Unweighted Mean of Preceding Groups of Trades.	
						Including Agriculture.	Excluding Agriculture.
1891.....	87.78	86.52	93.31	96.89	93.22	91.54	91.13
1892.....	88.89	78.88	93.31	96.00	93.22	90.06	89.27
1893.....	90.00	80.44	92.60	94.97	92.66	90.13	89.50
1894.....	91.11	76.13	92.56	94.97	92.66	89.49	88.69
1895.....	92.22	72.54	93.18	94.97	92.66	89.11	88.23
1896.....	93.33	71.90	96.75	94.97	92.66	89.92	89.24
1897.....	94.45	72.60	98.18	94.97	93.79	90.80	90.05
1898.....	97.78	78.60	99.19	94.97	95.48	93.20	92.64
1899.....	98.99	83.53	99.61	98.22	96.61	95.37	95.06
1900*.....	100.00	100.00	100.00	100.00	100.00	100.00	100.00
1901.....	100.00	93.95	100.29	100.00	101.13	99.07	98.56
1902.....	100.00	87.53	100.29	100.00	101.13	97.78	96.96
1903.....	100.00	84.92	99.93	100.00	101.13	97.20	96.21
1904.....	100.00	82.31	99.93	100.00	101.13	96.67	95.56
1905.....	100.00	81.02	100.05	102.67	101.41	97.03	95.94
1906.....	100.00	83.36	100.83	106.22	101.69	98.42	97.60
1907.....	100.00	96.25	102.00	108.89	101.69	101.77	101.79
1908.....	100.00	93.30	101.68	108.89	102.26	101.23	100.97
1909.....	100.00	89.20	101.32	107.11	102.26	99.98	99.41
1910.....	100.00	89.65	102.03	107.11	102.82	100.32	99.70
1911.....	100.00	88.83	103.26	107.11	103.11	100.46	99.83
1912.....	101.11	93.80	104.24	110.67	105.08	102.98	102.46

\* Base year.



A summary of the Department's record of changes in wages and hours of labour follows:—

### CHANGES IN WAGES CLASSIFIED BY INDUSTRIES.\*

(Compiled from the Annual Reports of the Board of Trade on Changes in Wages and Hours of Labour.)

Year.	Number of changes.	Number of separate individuals affected.			Amount of change in weekly wages.		
		By Increase.	By Decrease.	Total.	Increase.	Decrease.	Net Increase (+) or Decrease (—)
					£	£	£
1900.....	1,413	1,109,284	23,010	1,132,386	211,412	2,822	+ 208,590
1901.....	966	429,715	489,318	928,926	40,790	117,377	— 76,587
1902.....	470	91,812	789,891	887,206	5,326	77,921	— 72,595
1903.....	443	21,327	874,721	896,598	1,542	39,869	— 38,327
1904.....	412	16,054	784,604	800,658	1,202	40,432	— 39,230
1905.....	383	319,304	249,586	688,889	16,333	18,502	— 2,169
1906.....	794	1,097,984	5,140	1,115,160	58,409	512	+ 57,897
1907.....	825	1,243,534	2,930	1,246,464	201,152	240	+ 200,912
1908.....	686	119,327	464,216	963,333	7,260	66,431	— 59,171
1909.....	435	18,371	1,181,505	1,154,796	986	69,908	— 68,322
1910.....	521	391,183	137,469	548,938	16,413	1,879	+ 14,534
1911.....	1,138	507,207	399,362	916,366	46,247	11,669	+ 34,578
1912.....	1,963	1,804,844	46	1,816,640	139,210	6	+ 139,204

\* These statistics are necessarily incomplete. They do not include changes in the rates of agricultural labourers, seamen and railway servants, while many changes in other trades, especially those which are unorganized, escape notice. Changes affecting less than five persons have been omitted.

The special inquiry made by the Department in 1912 into the cost of living and wages in leading cities of the United Kingdom in continuation of a similar inquiry in 1905, contains the following analysis of wages increases between 1905 and 1912:—

### RATE OF WAGES: MEAN PERCENTAGE INCREASE BETWEEN OCTOBER, 1905, AND OCTOBER, 1912, BY GEOGRAPHICAL GROUPS,

Geographical Group.	Number of Towns included.	Mean percentage increase.				
		Building.		Engineering.		Printing.
		Skilled Men.	Labourers.	Skilled Men.	Labourers.	Compositors.
London.....	1	1	Nil.	3	9	Nil.
Northern Counties and Cleveland.....	9	0·1	1·7	5·9	— †	2·3
Yorkshire (except Cleveland).....	10	2·0	2·1	5·1*	— †	1·6*
Lancashire and Cheshire.....	17	2·6	2·6	4·8*	5·0*	2·9*
Midlands.....	14	2·2	3·6	5·9*	1·3*	4·8
Eastern and East Midland Counties.....	7	0·3	1·1	— †	— †	4·5*
Southern Counties.....	10	0·9	1·6	— †	— †	3·9*
Wales & Monmouth.....	4	5·8	6·8	— †	— †	10·5*
Scotland.....	10	3·0	1·1	— †	— †	6·9
Ireland.....	6	0·5	5·3	— †	— †	3·2*

\* The number of towns used in calculating this percentage is less than the total number included in the geographical group.

† The number of towns for which comparable information is available for October, 1905, and October, 1912, is insufficient to justify the calculation of a mean percentage for the group.

On the tendency in wages in the United Kingdom between 1905 and 1912 as shown by the inquiry the report states:

"Although in many cases rates of wages were at the same level at the dates of the two inquiries, and in a few instances in the building trades were slightly lower in 1912 than in 1905, on the whole there was a distinct upward movement between the two dates in each of the five groups (skilled men and labourers in the building and engineering trades and skilled men in the printing trade). The rise was least marked in the building trades, in which only 26 of the 88 towns showed increases exceeding two per cent for skilled men, and 45 out of the 88 towns showed no change or a slight decrease for labourers. The group with the greatest rise in wages is that of skilled men in the engineering trade, 54 out of the 57 towns for which information is available having had increases of from 2 to 10 per cent; rather less advance was shown in the rates for engineering labourers. For compositors in the printing trade 24 towns showed no change in wages; the remaining 54 towns for which particulars are available had advances ranging from 3 to 15 per cent. The mean percentage increases in rates of wages in all the towns are: building trade—skilled men, 1.9, labourers, 2.6; engineering trade—skilled men, 5.5, labourers, 3.9; printing trade—compositors, 4.1."

A valuable article on the course of real wages in London since the beginning of the century by Mrs. Frances Wood was published in the Journal of the Royal Statistical Society for December, 1913. The retail food and wages statistics were obtained by private investigation, the former including the principal articles of food and rentals and the latter representing the nine trades which it is estimated include about one-half of the manual workers of London. The conclusions of this very thorough inquiry may be seen from the following table of index numbers:—

(Average 1900-1912 equals 100.)

Year.	Retail food prices. (London)	Cost of living. (London)	Wages. * (London)	"Real" Wages. (London)	Consumption per head. (United Kingdom)
1900.....	100.0	100.0	100.0	100.0	100.0
1901.....	99.9	100.3	100.4	100.0	99.7
1902.....	100.9	101.0	98.8	97.9	98.9
1903.....	100.9	101.2	97.5	96.4	96.5
1904.....	102.0	101.8	95.0	93.3	98.0
1905.....	103.1	102.6	94.9	92.5	97.0
1906.....	102.5	102.3	96.5	94.4	98.8
1907.....	102.2	102.1	96.3	94.4	98.5
1908.....	104.5	104.1	91.2	87.6	96.3
1909.....	105.5	104.8	91.3	87.2	98.3
1910.....	106.1	105.2	95.1	90.4	96.2
1911.....	106.8	105.8	99.8	94.4	97.6
1912.....	108.5	107.0	100.9	94.4	98.8

\* Including changes in the amount of employment.

The writer adds:

"According to the present investigation between 1900 and 1912 retail prices in London increased by about 8 per cent. The Board of Trade, on the other hand, estimate the increase at about 15 per cent. ....

"During this period wages have not kept pace with the prices, even when the increase which took place in 1912 is included. While the cost of living increased by 7 per cent, wages, when changes in the amount of employment are taken into consideration, only increased by about one per cent. In other words, taking the period as a whole, 'real wages' in London show a marked decrease. Between 1900 and 1909 they dropped by about 13 per cent, and between 1909 and 1912 rose by about 8 per cent, with the net result that for the whole period they actually dropped by about 6 per cent. ....

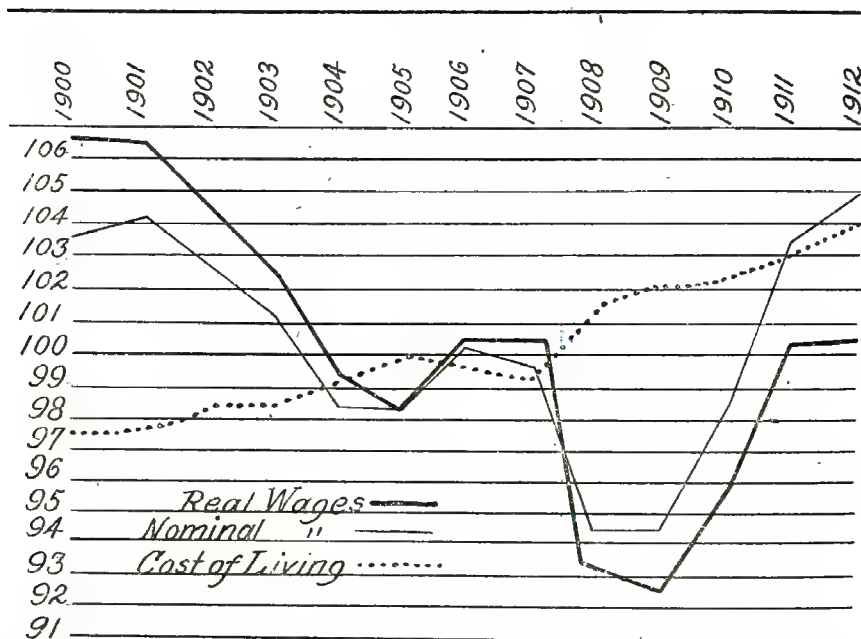


"The purpose of this inquiry was to discover to what extent the prosperity of the working classes in London had changed during recent years. The results obtained show that there has been a substantial increase in the cost of living which has not been accompanied by a correspondingly large increase in wages. If the Board's figures for the change in retail prices are taken in preference to those obtained during the present investigation, the discrepancy between increase in the cost of living and the increase in wages is still more marked."

Commenting on this tendency, Mr. J. A. Hobson ("Gold, Prices and Wages," p. 122) says:

"The rise of prices has been the signal for the stoppage of the rise of real wages which had been taking place, with a few slight breaks, during the previous generation. During the opening decade of this century a positive decline of real wages has taken place in Great Britain. In various degrees the same is true of the real wages of the working classes in the United States and Canada, in France, Germany and Italy. In

WAGES AND COST OF LIVING, LONDON, 1900-1912.



some cases the loss of real wages has been considerable, in others trifling, but this century has seen a weakening of the economic standard of life throughout the developed sections of the industrial world. . . . There has been a considerable enlargement of the national dividend, but labour has been getting a relatively smaller share. If anyone is disposed to cavil at the adequacy of this cumulative evidence that capital is getting a relatively larger, labour a relatively smaller, share, there remains the clinching testimony of the rise of interest. . . . The hire price of capital has risen at least equivalently to the rise in prices; the hire price of labour has either fallen or not risen at all. . . . Trade unionism, the newly-won representation of labour by workingmen in Parliament. . . . seems to avail nothing against this insidious attack upon their standard wages by the rise in prices."

Mr. Hobson accounts for the more favourable wages situation in new countries by the inflow of foreign capital, capital being greater in mobility than labour: "If

reliable statistics for South America were available, we should almost certainly discover that a rise of real wages for a rapidly increasing number of workmen has been taking place."

### THE UNITED STATES.

Yearly statistics of wages are collected by the United States Bureau of Labour Statistics, and by several of the States, notably Massachusetts, New Jersey and Kansas.

1890-1907.—The Federal Bureau conducted in 1901 an extensive investigation into wages, the results of which were presented in the Nineteenth Annual Report of the Commissioner of Labour, 1904. The investigation went back to 1890 and was designed to show the trend of wages and hours of labour in the distinctive occupations in the leading industries throughout the country. It was found necessary to omit transportation, mining and agriculture, but the manufacturing and mechanical industries were well represented, 3,475 establishments being visited and 519 occupations covered. The statistics were brought up to date from year to year thereafter until 1907, when they were discontinued. The final report of the series (Bulletin of the Bureau of Labour, No. 77, July, 1908), contained the following table of index numbers:—

RELATIVE EMPLOYEES, HOURS PER WEEK, WAGES PER HOUR, FULL TIME WEEKLY EARNINGS PER EMPLOYEE, RETAIL PRICES OF FOOD, AND PURCHASING POWER OF HOURLY WAGES AND OF FULL TIME WEEKLY EARNINGS PER EMPLOYEE, MEASURED BY RETAIL PRICES OF FOOD, 1890-1907.

(Relative numbers computed on basis of average for 1900=100.)

Year.	Employees.	Hours per week.	Wages per hour.	Full-time weekly earning per employee.	Retail prices of food weighted according to family consumption	Purchasing Power measured by retail prices of food, of	
						Hourly wages.	Full-time weekly earnings per employee.
1890.	82.0	102.0	95.1	97.1	101.3	93.8	95.7
1891.	84.2	101.8	95.1	96.9	102.7	92.5	94.3
1892.	85.8	101.8	95.6	97.3	100.8	94.7	96.5
1893.	86.0	101.6	95.7	97.3	103.3	92.5	94.1
1894.	81.4	101.1	92.8	93.9	98.6	94.1	95.2
1895.	83.4	101.4	93.2	94.5	96.7	96.3	97.7
1896.	85.3	101.9	94.5	95.6	94.4	100.0	101.2
1897.	87.3	100.9	94.4	95.3	95.2	99.1	100.0
1898.	92.0	101.0	95.0	95.9	97.6	97.2	98.3
1899.	97.0	100.5	96.7	97.3	98.4	98.2	98.8
1900.	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.	103.0	99.4	102.4	101.8	104.0	93.4	97.8
1902.	106.9	98.6	106.4	104.9	109.7	96.9	95.6
1903.	109.4	97.9	110.3	107.9	109.1	90.1	98.8
1904.	108.7	97.1	110.9	107.8	110.5	100.3	97.5
1905.	115.6	97.1	112.7	109.6	111.2	101.4	98.5
1906.	123.6	96.6	117.7	113.9	114.4	102.8	99.4
1907.	125.0	96.2	122.1	117.6	119.3	102.3	98.6

The report adds:

"Referring to the foregoing table it is seen, that . . . the lowest point was in 1894. . . . From 1894 the movement was upward for two years;

in 1897 there was a slight decline. From 1897 there was an advance each year. . . . Wages per hour in 1907 in the manufacturing and mechanical industries of the country were higher than in any other year of the period covered. . . .

"While wages per hour were higher in 1907 than in any other year covered by this report, the regular hours of labour per week were lower in 1907 than in any other year of the period. . . . From 1890 the weekly hours decreased until 1894. . . . In 1895 there was a slight increase, after which there was a gradual decrease to the minimum in 1907."

In W. S. Mitchell's "Business Cycles" a table based on the Bureau of Labour Statistics is given in which the tendencies in selected manufacturing industries are shown. Commenting on this, he says: "On examining the figures for separate industries, one finds that there is less variety of fluctuation than in commodity markets. But still considerable differences appear between, say, cotton mills and foundries, or building trades and shoe factories. However, no industry escaped a reduction of wages after 1893, and none failed to register a large advance between 1894 and 1907."

Professor Mitchell has also analysed the Bureau's returns according to sexes. "Female wage-earners are shown to have received a greater relative increase of pay than any group of men represented by the table. This result may be due to the fact that nearly a quarter of the women represented by the data were employed in the cotton industry, where advance of wages has been specially rapid; or the rapid advance of wages in the cotton industry may be due to the fact that higher rates have been demanded by women and girls. Among men, the highest priced workers have secured the most rapid increases in pay, and the lowest priced the least rapid. Perhaps these differences are connected with differences in the scope and efficiency of trade union organization among wage-earners on the higher and lower planes."

A final comparison by Professor Mitchell of tendencies in England and the United States may be quoted: "When the English and American index numbers of wages are compared, they are found to reflect the differences in the course of business cycles. . . . In the depression of 1901-04 the English wage-earners lost much of the gains they had scored in the prosperous years 1896-1900. American wages, on the contrary, received no set-back in the short-lived depression of 1903-1904. It is for this reason that in 1907 the American table shows much heavier gains than the English table over the level of 1890. But when only the first decade is examined, the comparison comes out the other way. Depression was more severe on this side of the Atlantic, and the relative prices of labour in 1900 were materially lower here than in England."

1907-1912.—For some time after 1907 no wages statistics were compiled by the Washington Bureau. In 1913, however, a bulletin was issued, showing the *union* scale of wages and hours of labour, 1907-1912, for more than forty trades in thirty-nine important industrial centres throughout the United States, including one-fifth of the total number of people in the country. No general index number for the several years, 1907 to 1912, was given, but the following table shows the per cent of change in hours of labour and rates of wages in 1912 compared with 1907: —

PER CENT. OF CHANGE IN HOURS OF LABOUR PER WEEK AND RATES OF WAGES PER HOUR:  
1912 COMPARED WITH 1907.

(The figures of this table are based on a comparison of the rates of wages on May 15, each year, and the hours prevailing during the whole year, any change in hours, if for more than three months during the year, being taken into consideration. The per cent. of change for each city was given a weight equal to the approximate number of union employees in the trade in that city.)

Occupations.	Per cent. of decrease in hours per week; 1912 compared with 1907.	* Per cent. of increase in wages per hour; May 15, 1912, compared with May 15, 1907.	Occupations.	Per cent. of decrease in hours per week; 1912 compared with 1907.	Per cent. of increase in wages per hour; May 15, 1912, compared with May 15, 1907.
<b>Bakery trade:</b>			<b>Metal trades:</b>		
Bakers, first hands.....	17.7	22.0	Blacksmiths.....	2.1	10.3
Bakers, second hands.....	6.6	26.6	Blacksmiths' helpers.....	2.2	16.4
Bakers, third hands.....	10.1	40.7	Boiler makers.....	1.6	15.6
<b>Building trade:</b>			Boiler makers' helpers.....	2.4	16.9
Bricklayers.....	2.1	5.5	Core makers.....	2.3	13.8
Building labourer.....	2.5	6.5	Core makers' helpers.....	2.2	9.6
Carpenters.....	1.2	11.1	Machinists.....	1.3	7.4
Cement workers (finishers).....	1.8	5.7	Machinists' helpers.....	2.8	8.3
Cement workers' helpers.....	7.7	16.2	Pattern makers, wood.....		
Cement workers' laborers.....	1.4	17.5	Printing trades, book and job:		
Gas fitters.....	1.1	9.1	Bookbinder.....	11.1	16.8
Hod carriers.....	3.0	5.9	Bookbinder's helpers.....	No change	10.0
Inside wiremen.....	1.3	15.4	Compositors, book and job:		
Inside wiremen's helpers.....	2.6	11.7	Electrotypers:		
Marble setters.....	1.5	5.1	Batterymen and builders.....	4.2	17.5
Painters.....	1.9	12.6	Finishers.....	5.3	12.8
Plasterers.....	9.9	5.0	Molders.....	5.1	12.7
Plasterers' laborers.....	1.0	8.2	Linotype operators.....	2	7.0
Plumbers.....	1.2	10.7	Press feeders.....	9.8	22.6
Sheet-metal workers.....	1.7	12.9	Pressmen, cylinder press.....	6.0	21.0
Steam-fitters.....	2.0	13.1	Pressmen, Platen press.....	5.1	11.5
Steam-fitters' helpers.....	1.7	15.1	Printing trade, newspaper:		
Stonemasons.....	1.8	5.8	Compositors, daywork.....	5	10.4
Structural iron workers.....	2.7	11.1	Compositors, nightwork.....	1.1	6.1
Marble and Stone workers:			Linotype operators, daywork.....	4	8.6
Granite cutters.....	2.0	5.3	Linotype operators nightwork.....	3	5.9
Stone cutters.....	5	1.6	Pressmen, web presses, daywork.....	1.5	12.1
			Pressmen, web presses nightwork.....	1.5	9.1
			Stereotypers, day work.....	1.7	9.1
			Stereotypers, nightwork.....	1.6	9.0



A valuable study by Mr. I. M. Rubinow appearing in the American Economic Review for December, 1914, correlates the above table with the earlier statistics of the Bureau. The three cardinal tables of Mr. Rubinow follow :—

# INDEX OF WAGES PER HOUR.

Year.	Cotton Goods.	Woollen Goods.	Silk Goods.	Boots and Shoes.	Knit Goods.	Lumber.	Mill work.	Furniture.	Car-building.	Building trades.	Bakers.	Marble and Stonecutters.	Foundry and Machine Shops.	Printing, book and job.	Printing, Newspapers.	Average Now
1890.	93.8	89.4	100.2	94.7	110.7	96.7	93.6	98.2	102.2	88.5	93.1	93.9	97.7	89.5	96.9	95.7
1891.	91.7	89.2	94.7	93.7	112.0	96.2	94.8	99.2	101.7	89.1	93.7	94.8	98.8	91.1	93.7	95.4
1892.	91.6	90.4	100.2	95.4	105.1	96.3	91.8	100.1	100.8	90.9	94.1	95.6	101.2	90.8	93.0	95.8
1893.	96.9	94.9	103.6	96.7	104.3	94.8	94.4	98.8	103.3	91.0	94.0	95.0	100.1	91.7	92.2	96.6
1894.	91.3	85.2	104.5	95.9	101.3	91.8	91.6	97.1	97.1	88.8	92.3	93.4	97.2	91.1	91.7	94.4
1895.	90.6	83.6	103.1	97.4	107.7	92.1	92.6	95.6	97.1	89.5	92.6	92.4	97.6	91.0	90.6	94.2
1896.	92.1	88.1	108.2	96.6	104.1	92.4	93.7	95.6	96.9	90.9	93.4	95.3	99.0	91.8	92.8	95.5
1897.	92.7	90.2	100.7	96.8	100.7	92.7	94.4	97.9	97.5	92.2	93.6	96.8	98.2	90.8	93.3	95.1
1898.	89.3	92.8	100.0	96.6	101.0	96.3	96.0	95.7	87.3	93.5	94.4	96.4	97.5	92.6	96.7	95.7
1899.	88.4	91.0	99.0	97.8	97.7	99.2	98.3	99.7	99.1	95.8	96.7	98.3	97.6	94.8	99.8	95.8
1900.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.	100.4	100.5	99.7	100.0	106.9	103.1	102.5	104.8	101.0	104.2	102.1	103.9	103.1	101.3	102.0	102.2
1902.	104.6	103.2	103.0	103.8	116.3	106.4	106.2	111.5	105.0	110.2	106.8	108.2	106.6	104.6	102.9	107.0
1903.	108.5	106.6	104.2	108.8	123.2	108.4	109.2	112.6	110.7	115.0	111.5	113.0	110.5	106.2	106.7	110.3
1904.	108.1	103.6	103.4	112.3	120.3	106.6	109.2	114.8	115.4	118.0	113.6	113.3	112.2	108.8	107.4	111.1
1905.	109.6	107.1	104.1	115.2	125.7	110.4	110.2	118.2	114.1	120.3	115.8	113.7	112.3	110.3	109.3	114.2
1906.	121.2	114.1	107.8	117.0	133.0	118.1	113.8	122.8	117.7	127.6	119.5	115.6	116.1	115.2	111.1	118.0
1907.	138.3	121.5	113.9	123.0	140.0	123.0	117.5	124.4	123.5	131.6	120.9	119.8	119.6	119.9	115.4	123.5
1908.	137.0	115.0	116.9	120.6	140.1	112.6	116.5	124.6	120.9	133.7	130.4	120.2	121.1	124.4	117.3	122.7
1909.	132.0	115.8	112.3	125.3	140.5	115.4	117.9	123.8	119.7	136.7	131.3	121.0	122.5	127.5	118.6	124.1
1910.	136.3	119.0	114.3	124.5	142.0	123.4	120.6	127.6	131.3	139.3	138.4	122.1	128.1	131.2	121.6	128.0
1911.	137.6	119.7	115.1	126.6	142.3	123.8	121.8	129.1	134.3	143.4	146.0	122.9	131.8	135.6	123.2	130.2
1912.	151.5	133.9	119.0	127.6	150.6	124.8	124.9	132.0	134.9	145.1	156.9	127.6	134.3	137.8	125.5	135.1



## INDEX OF HOURS PER WEEK.

Year.	Cotton Goods.	Woolen Goods.	Silk Goods.	Boots and Shoes.	Knit Goods.	Lumber.	Millwork.	Furniture.	Car building.	Building Trades.	Bakers.	Marble and Stone-cutters.	Foundry and Machine Shops.	Printing, Book and Job.	Printing, Newspapers.	Average of preceding indexes.
1890.	100.4	101.2	103.0	101.0	102.2	100.9	102.4	101.1	100.2	107.3	104.0	104.4	101.3	106.3	102.7	102.5
1891.	101.1	101.2	103.3	101.3	102.2	100.7	101.7	100.5	99.7	106.6	104.0	103.0	101.2	106.3	102.6	102.3
1892.	101.5	101.2	102.3	101.0	102.3	100.7	101.8	99.6	100.2	105.4	104.1	103.1	101.0	105.7	103.1	102.1
1893.	99.9	99.7	99.2	100.7	101.6	100.5	101.2	99.7	99.8	105.2	103.7	103.9	100.8	105.6	103.3	101.8
1894.	97.4	99.2	99.0	100.7	95.8	100.9	101.4	98.0	95.7	105.4	103.6	103.4	100.7	105.3	103.0	100.6
1895.	99.7	100.3	98.9	100.7	101.5	100.4	100.8	99.6	97.5	105.0	103.1	103.0	100.9	105.4	102.9	101.2
1896.	99.4	100.3	99.4	100.7	95.8	100.6	100.1	99.3	97.4	103.9	102.8	102.8	100.6	105.3	102.7	101.0
1897.	99.0	98.6	99.5	100.5	101.4	100.4	100.7	99.4	96.6	103.2	103.4	102.3	100.5	105.4	102.5	100.9
1898.	100.2	99.1	99.7	100.4	101.4	100.1	100.5	100.2	100.4	102.7	102.3	102.1	100.7	104.6	101.6	101.0
1899.	100.2	100.2	99.9	100.3	101.3	100.3	100.3	100.1	99.7	102.1	100.9	100.9	100.2	102.3	100.3	100.6
1900.	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1901.	99.8	100.1	99.6	100.3	99.9	99.8	99.8	99.1	99.2	98.8	99.4	98.8	98.9	99.3	99.8	99.5
1902.	99.4	100.0	99.1	99.1	100.0	99.2	98.8	98.1	96.7	97.0	98.9	98.3	97.4	98.0	98.6	98.8
1903.	99.2	98.9	99.2	97.7	99.0	98.8	98.3	97.9	95.4	96.1	96.9	96.7	96.2	97.9	98.1	98.1
1904.	99.1	98.1	97.6	97.7	98.9	98.3	99.0	97.1	94.9	95.6	96.6	96.7	95.4	97.2	98.6	97.3
1905.	98.6	98.7	98.6	97.5	98.8	98.1	99.2	96.4	94.6	95.5	95.5	96.9	95.6	96.8	98.1	97.3
1906.	98.0	98.6	98.8	97.0	98.3	97.1	98.0	95.6	94.6	95.2	94.7	96.4	95.0	95.4	97.8	96.7
1907.	97.4	98.1	98.3	96.7	97.9	96.9	97.8	95.5	93.6	94.9	94.5	96.2	95.4	95.4	97.8	95.8
1908.	96.2	97.9	98.0	95.6	97.6	97.1	97.8	95.7	93.6	94.6	92.6	96.0	95.3	91.9	97.2	95.4
1909.	96.3	98.0	97.9	95.4	97.1	97.0	97.8	95.3	94.1	94.4	91.4	95.9	94.6	91.3	96.8	95.7
1910.	94.0	96.3	97.8	95.8	95.8	97.0	97.8	94.9	93.9	93.9	89.6	95.7	94.1	90.5	96.4	95.1
1911.	94.0	96.4	97.8	95.0	95.7	97.0	97.9	94.3	93.3	93.6	88.1	95.6	93.5	89.9	96.2	94.6
1912.	92.3	94.3	97.0	94.1	94.1	97.1	97.3	93.7	93.1	93.4	83.8	94.5	93.5	89.9	96.1	94.3

## COMPUTATION OF INDEX OF REAL WAGES, 1890-1912.

Year.	Hours per week.	Wages per hour.	Full time weekly earnings per employee.	Retail prices of food.	Purchasing power measured by retail prices of food.	
					Hourly wages.	Weekly earnings.
1890.....	102.5	95.7	98.2	98.9	96.7	99.2
1891.....	102.3	95.4	97.7	100.4	95.1	97.3
1892.....	102.1	95.8	97.9	98.7	97.1	99.2
1893.....	101.8	96.6	98.5	101.1	95.6	97.4
1894.....	100.6	94.4	95.1	96.3	98.1	98.7
1895.....	101.2	94.2	96.1	94.3	99.9	102.0
1896.....	101.1	95.5	96.6	92.4	103.3	104.5
1897.....	100.9	95.1	96.0	93.9	101.4	102.3
1898.....	101.0	95.7	96.7	96.8	98.9	99.9
1899.....	100.6	96.8	97.5	97.9	99.0	99.6
1900.....	100.0	100.0	100.0	100.0	100.0	100.0
1901.....	99.5	102.2	101.7	105.4	97.0	96.6
1902.....	98.8	107.0	105.7	111.3	96.1	94.1
1903.....	98.1	110.3	108.2	111.4	99.1	97.1
1904.....	97.3	111.1	108.1	112.8	98.4	95.8
1905.....	97.3	114.2	111.2	113.0	101.2	98.4
1906.....	96.7	118.0	114.2	116.8	101.1	97.8
1907.....	96.4	123.5	119.2	122.2	101.1	97.5
1908.....	95.8	122.7	117.6	126.3	97.2	92.8
1909.....	95.7	124.1	118.8	133.2	93.2	89.2
1910.....	95.1	128.0	121.8	140.0	91.5	87.0
1911.....	94.6	130.2	123.3	138.9	93.8	88.7
1912.....	94.3	135.1	127.5	149.7	90.3	85.1

The comment follows:—

"The loss of real wages within the last five years was about 7 or 8 per cent, and within the last twelve years some 10 per cent. In years of falling or even slowly rising prices, the American wage-worker was able to hold his own or to improve his condition to a slight extent. But when confronted with a rapidly rising price movement (accompanied as it was by a violent growth of profits), the American wage-worker, notwithstanding his strenuous efforts to adjust wages to these new price conditions, notwithstanding all his strikes, boycotts and riots, notwithstanding all the picturesque I. W. W.-ism, new unionism, and the modish sabotage, has been losing surely and not even slowly, so that the sum total of economic progress of this country for the last quarter of a century appears to be a loss of from 10 to 15 per cent in his earning power."

*Massachusetts.*—The annual census of manufactures gives figures of average yearly earnings for each year back to 1896. The Bureau of Statistics also records changes in rates of wages and collects returns of current rates from trade unions. The statistics of the Bureau show that wages advanced fifty per cent between 1860 and 1897. Between 1897 and 1908 the average increase was about twenty per cent. Since 1908 another increase of at least ten per cent has taken place.

The following table of average weekly earnings is compiled from the annual censuses of manufactures:—

## AVERAGE YEARLY EARNINGS, MASSACHUSETTS, 1900, 1904, 1908 AND 1912.

Industries.	1900.		1904.		1908.		1912.	
	\$	cts.	\$	cts.	\$	cts.	\$	cts.
Boots and shoes.....	463	44	513	86	562	59	605	11
Carpetings.....	373	66	423	46	443	97	499	05
Carriages and wagons.....	600	67	609	58	663	73	700	79
Clothing.....	372	25	394	27	453	00	552	80
Cotton goods.....	361	17	366	95	439	34	435	65
Furniture.....	500	13	481	74	531	50	571	00
Hosiery and knit goods.....	337	28	348	69	399	89	432	57
Leather.....	482	12	494	70	537	49	582	60
Machines and machinery.....	554	19	569	69	.....	.....	.....	.....
Metals and metallic goods.....	511	76	553	86	.....	.....	.....	.....
Paper and paper goods.....	424	31	466	31	.....	.....	523	23
Rubber and elastic goods.....	413	06	474	98	498	64	561	02
Stone.....	534	64	591	92	.....	.....	.....	.....
Wooden goods.....	462	61	500	35	543	87	569	95
Woollen goods.....	402	01	421	67	455	49	489	78
Worsted goods.....	375	66	399	00	444	35	489	78

NOTE.—Other States whose wage statistics show similar tendencies are New Jersey, Wisconsin, Kansas, Michigan, New Hampshire and Pennsylvania.

## AUSTRALIA.

The Commonwealth Bureau of Census and Statistics has obtained a record of wages back to 1891 collected from trade unions, Government Departments and awards of Industrial Courts and Wages Boards.<sup>1</sup> Altogether 652 occupations are covered, the rates being for the most part union or "predominant" wages. The returns have been reduced to a series of group index numbers (weighted) as follows:—

<sup>1</sup>Trade Unionism, Unemployment, Wages, Prices, and Cost of Living in Australia, 1891-1912. Commonwealth Bureau of Census and Statistics; Labour and Industrial Branch, Report No. 2.

VARIATIONS IN WAGE INDEX NUMBERS IN DIFFERENT INDUSTRIES IN THE COMMONWEALTH, 1891 TO 1912.  
(Wages in 1901 = 100.)

Particulars	Number of occupations included.	1891.	1896.	1901	1906.	1907.	1908.	1909.	1910.	1911.	1912.
I. Wood, furniture, etc..	27	100.4	92.2	100.0	100.5	102.9	103.1	103.6	107.6	110.4	112.3
II. Engineering, metal works, etc.	101	98.5	98.3	100.0	101.3	102.8	104.7	105.3	106.5	112.6	116.9
III. Food, drink, etc.	34	85.5	85.1	100.0	101.9	103.6	104.0	105.0	106.6	113.9	119.3
IV. Clothing, hats, boots, etc.	13	101.1	100.1	100.0	118.7	120.8	122.4	132.0	137.8	138.5	139.7
V. Books, printing, etc.	25	105.8	99.1	100.0	101.7	102.4	103.5	108.6	111.8	116.6	120.6
VI. Other manufacturing	102	99.6	95.2	100.0	99.9	99.7	80.9	101.8	104.4	111.7	114.3
VII. Building	67	94.8	89.1	100.0	103.0	106.2	107.2	108.7	111.8	116.6	119.7
VIII. Mining, quarries, etc.	71	106.3	98.6	100.0	102.5	104.7	104.6	105.1	109.5	112.0	114.0
IX. Railway services, etc.	68	97.1	97.4	100.0	100.2	100.5	100.7	104.1	105.1	108.9	113.9
X. Other land transport	9	97.0	88.3	100.0	100.0	102.2	105.1	105.1	111.8	114.4	124.8
XI. Shipping, etc.	74	99.3	89.7	100.0	103.7	104.9	104.9	114.0	114.1	116.0	125.6
XII. Agriculture, etc.	8	108.5	104.3	100.0	107.1	116.5	117.4	125.6	127.3	133.9	150.6
XIII. Domestic, hotel, etc.	17	107.3	96.6	100.0	101.4	101.8	104.8	121.5	124.4	148.4	149.6
XIV. Miscellaneous, etc.	36	101.8	99.4	100.0	101.6	107.1	108.1	111.1	117.1	122.4	123.8
All groups*	652	100.0	95.2	100.0	102.1	105.3	106.1	108.8	112.6	117.9	123.9

\*Weighted average.

NOTE.—The figures in the above table are comparable horizontally, but are not directly comparable vertically. This is evident from the fact that the average wage in each industry group (and for all groups) in 1901 is made equal to 100.

The comment of the report on the above table is as follows:—

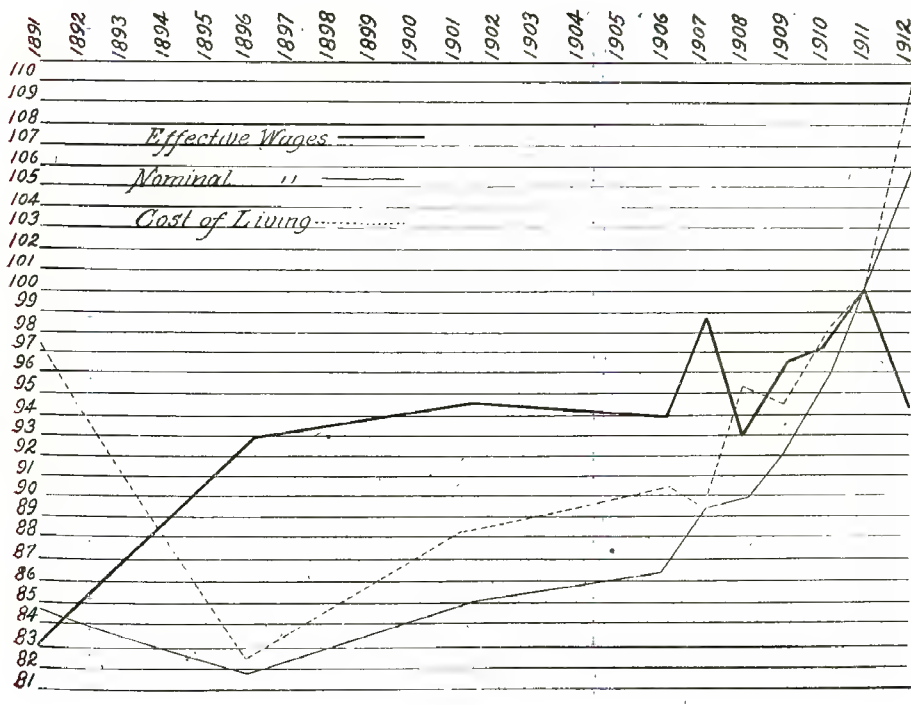
"It may be seen that the index numbers increase during the whole period under review except in 1896, when there was a fall. The wage index number increased from 100 in 1891 to 117·9 in 1911, and 123·9 in 1912. It will be observed that the increase from 1891 to 1911 was relatively greatest in Classes XIII. (Domestic, Hotels, etc.). IV. (Clothing, Hats, Boots, etc.), and III. (Food, Drink, Tobacco, etc.), and it is probably in the industries and occupations included in these groups that "sweating" was most prevalent. The relative increase is least in Class VIII. (Mining, Quarries, etc.), the index number for that group having increased only from 106·3 in 1891 to 112·0 in 1911 and 114·0 in 1912."

In addition the Australian Bureau has computed statistics of effective wages, i.e., nominal rates of wages corrected so as to take account of (a) variations in the cost of living, and (b) loss of time through unemployment. The index numbers follow:—

UNEMPLOYMENT, COST OF LIVING AND NOMINAL AND EFFECTIVE WAGE  
INDEX NUMBERS, 1891 TO 1912.

Year.	Nominal wages, Index numbers.	Percentage Unemployed.	Cost of living Index numbers.	Effective wages, Index numbers.
1891.....	100 0	140·9	110·5	87·8
1896.....	96 2	164·0	93·5	98 2
1901.....	100·0	100·0	100·0	100·0
1906.....	102·1	101·2	102·5	99·5
1907.....	105·3	87 1	101·9	104·3
1908.....	106·1	90·7	108 0	98·8
1909.....	108·8	87 8	107 7	101·9
1910.....	112·6	85·4	110·2	103·0
1911.....	117·9	70·8	113·6	105·8
1912.....	123·9	84·2	125·1	100·1

Based on Sydney prices only; exclusive of house rent. The accompanying chart shows this effectively.





## PRESENT WAGE LEVELS COMPARED.

Statistics of changes in wages offer no final evidence as to actual wage rates in the several countries compared with each other. On this point, perhaps, the most comprehensive information is to be gathered from the series of studies made by the United Kingdom Board of Trade between 1905 and 1909, to which reference has been made in preceding chapters.<sup>1</sup> The investigations of the Board of Trade covered only the building, engineering and printing trades, selected as representative of the more highly organized and skilled classes of labour. The average rates shown for the several countries in the several reports follow:—

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<sup>1</sup> See page 528.

## PREDOMINANT WEEKLY WAGES.

Classes.	United Kingdom.		United States.		France.		Germany.		Belgium.	
	No. of Cities.	Predominant range of weekly wages, October 1905.	No. of Cities.	Predominant range of weekly wages, February 1909.	No. of Cities.	Predominant range of weekly wages, October 1905.	No. of Cities.	Predominant range of weekly wages, October, 1905.	No. of Cities.	Predominant range of weekly wages, June 1908.
<i>Building Trades:</i>										
Bricklayers .....	72	9 00—9 72	25	26 40—30 00	30	5 18—6 92	33	6 46—7 50	15	4 98—5 76
Masons .....	72	8 92—9 44	25	23 10—26 40	30	5 18—6 92	33	6 46—7 50	15	4 98—5 76
Stonecutters .....			20	22 00—24 82	26	6 34—7 48			11	5 62—6 34
Carpenters and joiners .....	72	8 68—9 44	28	16 50—21 60	30	*5 76—7 26	33	6 46—7 50	15	*4 84—6 06
Plumbers .....	69	8 48—9 54	28	21 00—27 00	25	5 76—6 92	33	5 76—6 88	14	4 84—5 62
Plasterers .....	69	8 76—10 00	24	24 00—28 60	22	5 70—6 96			14	4 94—5 88
Structural iron workers .....			21	22 50—27 00						
Painters .....	70	7 56—9 00	28	15 60—20 40	29	5 14—6 34	33	5 76—7 12	15	4 50—5 18
Bricklayers' labourers .....	71	5 84—6 48	18	†12 00—16 50	29	3 80—4 76	33	**4 63—5 76	15	3 60—4 32
Masons' labourers .....	70	5 64—6 36	18	†12 00—16 50	29	3 80—4 76				
Plasterers' labourers .....	71	5 91—6 66	18	†12 00—16 50						
<i>Engineering Trades:</i>										
Iron moulders .....			27	16 50—19 50	26	5 75—7 02			10	4 92—6 24
† Fitters .....	61	7 68—8 64	28	15 20—17 88	30	5 75—6 92	33	6 24—7 68	14	4 56—5 48
† Turners .....	61	7 68—8 64	28	15 20—17 88	30	5 75—6 92	33	6 48—7 92	14	4 92—5 84
Smiths .....	56	7 68—8 64	24	16 24—20 56	21	6 04—7 62	33	6 88—7 92	11	4 82—5 88
Pattern-makers .....	57	8 16—9 12	25	17 88—22 00	22	6 12—7 14	33	6 12—7 20	13	4 70—4 80
Labourers .....	39	4 32—5 28	22	9 00—10 50	30	3 74—4 60	33	4 32—5 28	14	3 10—3 98
<i>Printing Trades:</i>										
Compositors .....	63	6 82—7 92	28	††16 50—19 50	23	5 48—6 92	33	5 94—6 22	13	4 58—5 50

\* Rates given are for carpenters. Joiners' rate is : France, \$5 70—6 34 for 30 cities. Belgium, \$4 90—5 62 for 15 cities. † Hod carriers and bricklayers' labourers. †† Hand compositors (job work). \*\* Builders' labourers. † Fitters and turners in England, France, etc., correspond to Machinists in United States and Canada.

The investigation of the Board of Trade was extended also to hours.

Expressing rates in the United Kingdom as 100, the following table of index numbers of comparative wages and hours has been collected from the reports:—

	United Kingdom.		United States.		France.		Germany.		Belgium.	
	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.	Wages.	Hours.
Building (9 classes).....	100	100	243	89	75	120	77	110	59	128
Engineering (5 classes).....	100	100	213	106	69	114	90	112	66	114
Printing (stand compositors).....	100	100	247	93	85	113	83	103	60	114
All.....	100	100	230	96	81	117	83	111	63	121

To these may be added the following statistics for Australia<sup>1</sup> and New Zealand.<sup>2</sup>

AVERAGE RATES OF WAGES IN THE CAPITAL CITIES OF EACH STATE, AUSTRALIA, WEIGHTED, PAYABLE TO JOURNEYMEN OR ADULT MALE WORKERS FOR A FULL WEEK'S WORK, 1913.

Industrial Groups.		No. of Rates included.	Weighted Average Weekly Wage (for full week's work)	
			s.	d.
I	Wood Furniture, etc.	124	58	0
II	Engineering, Metal Works, etc.	235	56	6
III	Food, Drink, etc.	206	54	1
IV	Clothing, Boots, etc.	40	51	6
V	Books, Printing, etc.	121	65	6
VI	Other Manufacturing.	341	55	3
VII	Building.	139	62	10
VIII	Mining, Quarries, etc.	125	60	10
IX	Railway Services, etc.	115	55	11
X	Other Land Transport.	12	47	3
XI	*Shipping, etc.			
XII	*Agricultural, etc.			
XIII	Hotels, etc.	29	42	9
XIV	Miscellaneous.	82	52	10
†All Groups		1,569	55	4

\* Insufficient data available for the satisfactory computation of an average.

† Weighted Average, exclusive of Groups XI and XII.

<sup>1</sup> Census Report No. 2, "Trade Unionism, Wages, etc." page 42.

<sup>2</sup> From the official Year-Book of New Zealand, 1913.

RANGE OF AVERAGE RATES OF WAGES IN THE PROVINCIAL DISTRICT OF AUCKLAND, NEW ZEALAND, DURING THE YEAR, 1912

Description of Labour.	Provincial District of Auckland.		
	s.	d.	s.
<b>Agricultural Labour—</b>			
Farm labourers, with board, per week.....	20	0	to 30
Harvesters, with board, per week.....	30	0	to 40
Female farm servants, with board, per week.....	10	0	to 15
<b>Artisan Labour, per day, without board—</b>			
Masons.....	12	0	to 15
Plasterers.....	12	0	to 16
Bricklayers.....	11	4	to 13
Cabinetmakers.....	10	0	to 12
Carpenters.....	10	8	to 12
Boilermakers.....	11	0	to 12
Blacksmiths.....	10	0	to 11
Plumbers.....	10	0	to 12
Painters.....	10	0	to 12
Shoemakers.....	8	0	to 11
Coopers.....	00	10	to 00
<b>Servants—</b>			
Cooks, with board, per week.....	20	0	to 40
General house servants, with board, per week.....	15	0	to 20
Housemaids, with board, per week.....	15	0	to 20
<b>Miscellaneous—</b>			
General labourers, without board, per day.....	8	0	to 10
Tailors, without board, per day.....	8	4	to 12
Bakers, without board, per week.....	50	0	to 65
Compositors, without board, per week.....	50	0	to 65
Sawmill hands, without board, per week.....	50	0	to 72

The figures for the United States are based on averages for twenty-eight cities<sup>1</sup> east of the Mississippi. They are, it will be seen, slightly higher on the whole than Canadian rates. Apparently it would be safe to say that wages in these trades in Canada are double those paid in Great Britain, nearly but not quite treble those paid in France and Germany and at least three and a half times those obtaining in Belgium. The Economic Commission of South Africa<sup>2</sup> arrives at the following conclusions as to the comparative money wages of skilled artisans in the several countries at the present time (Johannesburg wages equal 100):—

	Wages.	Hours.	Real Wages.
South Africa.....	80	104	92-101
England and Wales.....	31	109	63
France.....	23	127	43
Germany.....	26	121	46
Belgium.....	20	132	44
United States.....	72	104	101
Canada.....	70	105	100
Australia.....	60	100	98
New Zealand.....	58	.....	102

<sup>1</sup> New York, Boston, Brockton, Fall River, Lawrence, Lowell, Providence, Baltimore, Newark, Paterson, Philadelphia, Cincinnati, Cleveland, Detroit, Louisville, Muncie, Pittsburg, Chicago, Duluth, Milwaukee, Minneapolis, St. Paul, St. Louis, Atlanta, Augusta, Birmingham, Memphis, New Orleans and Savannah.

<sup>2</sup> Report, p. 23.

NOTE.—The "Abstract of Foreign Labour Statistics" published by the Labour Department of the Board of Trade of the United Kingdom contains typical wages statistics for the following countries:—

Russia, Denmark, Norway, Sweden, Germany, Holland, Belgium, France, Italy, Austria-Hungary and Japan.

An interesting study in comparative railway wages is contained in Bulletin No. 34 of the Bureau of Railway Economics, Washington, D.C., in which wages in the United States, the United Kingdom and the principal countries of Continental Europe are analysed. For an analysis of recent wages statistics of the United States see Scott Nearing, "Wages in the United States," 1911.

## I.—AGRICULTURE.

Note.—For the purpose of the inquiry agriculture is divided into two main branches, (I), grain, stock, dairy and mixed farming, and (II), fruit farming. Under the first heading the employees are divided into (1), experienced and (2), inexperienced; and the wages for each are set forth according as the terms of the engagement is (a), for the whole year; (b), from spring to fall; and (c), by the day for short periods during the harvesting season. In the case of fruit farming, the wages of skilled orchardmen and pickers are given, the latter being divided into pickers of tree fruits and pickers of small fruits. In the case of general farm hands, the statistics are from two sources, (1), Experimental Farms and Agricultural Colleges, and (2), Correspondents to the *Labour Gazette*. The returns relating to fruit farming are from individual growers.

### Grain, Stock, Dairy and Mixed Farming.

#### (a) Data from Experimental Farms and Agricultural Colleges.

##### EXPERIENCED HELP WHEN ENGAGED BY THE YEAR, WITH BOARD.

LOCALITY.	Unit	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Nappan.....	Year..	250	250	250	250	250	250	250	250	250	250	250	325	325	.....
<i>Prince Edward Isle.:</i>															
Charlottetown....	Month	10	10	10	10	10	10	10	11	13	15	17	18	18	20
<i>Quebec:</i>															
La Trappe.....	Day..	1.00	1.00	1.00	1.00	1.10	1.10	1.20	1.20	1.25	1.25	1.35	1.40	1.40	1.50
MacDonald College	Year..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	575	575	625	.....
<i>Ontario:</i>															
Guelph.....	Month	40	40	40	40	40	40	40	40	45	45	45	45	45	45
<i>Manitoba:</i>															
Winnipeg.....	Year..	200	200	200	200	200	250	250	250	250	300	300	300	325	325
<i>Saskatchewan:</i>															
Rosthern.....	Month	.....	.....	.....	.....	.....	.....	.....	.....	.....	55	60	65	65-70	60-75
Indian Head.....	Month	25	25	25	26	26	26	27	27	28	28	30	30	30	30
<i>Alberta:</i>															
Lacombe.....	Year..	.....	.....	.....	.....	.....	.....	.....	100	100	500	550	575	600	500-600
Lethbridge.....	Month	.....	26	26	26	26	26	31	31	34	34	36	36	36	36



## EXPERIENCED HELP WHEN ENGAGED FROM SPRING TO FALL SEASON, WITH BOARD.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Nappan.....	Year..	150	150	150	150	150	150	150	150	150	150	150	200	200	.....
<i>Prince Edward Isle.</i>															
Charlottetown....	Month	12	12	12	12	12	12	13	14	16	18	19	20	20	24
<i>Quebec:</i>															
La Trappe.....	Day..	1.20	1.20	1.20	1.20	1.30	1.30	1.40	1.50	1.50	1.50	1.60	1.75	2.00	2.00
MacDonald College	Day..	.....	.....	.....	.....	.....	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	.....
<i>Ontario:</i>															
Guelph.....	Day..	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75
<i>Manitoba:</i>															
Winnipeg.....	Month	25	25	25	25	25	30	30	30	30	35	35	35	40	1.92 2.35 40
<i>Saskatchewan:</i>															
Indian Head.....	Month	30	32	32	35	35	35	37	30- 37	30- 37	35- 37	35- 37	35- 37	37- 40	37- 40
<i>Alberta:</i>															
Lethbridge.....	Month	.....	30	30	35	30	30	35	35	35- 40	35- 40	40	40	40	40

## EXPERIENCED HELP WHEN ENGAGED DURING HARVESTING SEASON.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Nappan.....	Day..	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.50	.....
<i>Prince Edward Isle.</i>															
Charlottetown....	Day..	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.25	1.25	1.75
<i>Quebec:</i>															
La Trappe.....	Day..	1.20	1.20	1.20	1.20	1.30	1.30	1.40	1.50	1.50	1.50	1.60	1.75	1.75	2.00
MacDonald College	Day..	.....	.....	.....	.....	.....	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	.....
<i>Ontario:</i>															
Guelph.....	Day..	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75
<i>Manitoba:</i>															
Winnipeg.....	Month	35	35	35	35	35	40	40	40	40	45	45	45	50	50
<i>Saskatchewan:</i>															
Indian Head.....	Day..	1.50	1.75	1.75	1.75	2.00	2.00	2.00	2.00	2.00	2.25	2.50	2.50	2.50	2.50- 3.00
Rosthern.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.35- 2.50
<i>Alberta:</i>															
Lacombe.....	Month	.....	.....	.....	.....	.....	.....	.....	35	32	35	40	42	45	40- 45
Lethbridge.....	Day..	.....	1.50	1.50	1.50	1.50	1.50	1.75	1.75	2.00	2.00	2.50	2.50	2.50	2.50
	.....	.....	2.75	2.75	2.75	2.75	2.75	2.75	2.75	3.00	3.00	3.00	3.00	3.00	3.00

## INEXPERIENCED HELP WHEN ENGAGED BY THE YEAR, WITH BOARD.

LOCALITY.	Unit	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i> Nappan.....	Year..	175	175	175	175	175	175	175	175	175	175	175	200	200	.....
<i>Prince Edward Isle.:</i> Charlottetown....	Month	8	8	8	8	8	8	8	8	8	9	10	11	13	15
<i>Quebec:</i> La Trappe.....	Day..	0.50	0.50	0.50	0.60	0.60	0.60	0.70	0.70	0.75	0.75	0.80	0.90	1.00	1.00
<i>Ontario:</i> Guelph.....	Month	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15	10- 15
<i>Manitoba:</i> Winnipeg.....	Year..	100	100	100	100	100	125	125	125	125	150	150	150	150	150
<i>Saskatchewan:</i> Indian Head.....	Month	22	22	22	22	22	22	24	24	24	24	25	25	25	25
<i>Alberta:</i> Lacombe.....	Year..	.....	.....	.....	.....	.....	.....	.....	300	300	325	350	400	450	450

## INEXPERIENCED HELP WHEN ENGAGED FROM SPRING TO FALL SEASON, WITH BOARD.

LOCALITY.	Unit	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i> Nappan.....	Year..	100	100	100	100	100	100	100	100	100	100	100	120	120	.....
<i>Prince Edward Isle.:</i> Charlottetown....	Month	10	10	10	10	10	10	10	10	10	11	12	13	14	16
<i>Quebec:</i> La Trappe.....	Day..	0.60	0.60	0.60	0.70	0.70	0.70	0.80	0.80	0.85	0.85	0.90	0.90	1.00	1.10
MacDonald College	Day..	.....	.....	.....	.....	.....	1.75	1.75	1.75	1.50	1.50	1.75	1.75	1.75	.....
<i>Ontario:</i> Guelph.....	Month	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18	12- 18
<i>Manitoba:</i> Winnipeg.....	Month	15	15	15	15	15	20	20	20	20	25	25	25	25	25
<i>Saskatchewan:</i> Indian Head.....	Month	25	25	25	25	26	26	28	28	28	28	30	30	30	30
Rosthern.....	Day..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.87	1.92	1.92	2.10	.....
<i>Alberta:</i> Lacombe.....	.....	.....	.....	.....	.....	.....	.....	.....	25	25	25	25	30	35	30-
Lethbridge.....	Month	.....	15	15	15	15	15	15-	15-	15-	15-	15-	15-	15-	15-
	.....	.....	.....	.....	.....	.....	.....	20	20	25	25	30	30	30	30

## INEXPERIENCED HELP WHEN ENGAGED DURING HARVESTING SEASON.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Nappan.....	Day..	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	1.00	1.00	.....
<i>Prince Edw. Island:</i>															
Charlottetown....	Day..	0.50	0.50	0.50	0.50	0.50	0.50	0.60	0.60	0.75	0.75	0.85	0.85	1.00	1.50
<i>Quebec:</i>															
La Trappe.....	Day..	0.60	0.60	0.60	0.70	0.70	0.70	0.80	0.80	0.85	0.85	0.90	0.90	1.00	1.10
MacDonald College	Day..	.....	.....	.....	.....	.....	1.75	1.75	1.75	1.60	1.60	1.60	1.75	1.75	.....
<i>Ontario:</i>															
Guelph.....	Day..	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
<i>Manitoba:</i>															
Winnipeg.....	Month	25	25	25	25	25	30	30	30	30	35	35	35	35	35
														40	40
<i>Saskatchewan:</i>															
Indian Head.....	Day..	1.35	1.50	1.50	1.50	1.75	1.75	1.80	1.80	1.90	2.25	2.45	2.50	2.50	2.50
Rosthern.....	Day..	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.92	2.10	2.25	2.35	.....
<i>Alberta:</i>															
Lacombe.....	Month	.....	.....	.....	.....	.....	.....	.....	30	30	31	33	35	38	35
															40

## (b) Data from Correspondents to the Labour Gazette.

## EXPERIENCED HELP WHEN ENGAGED BY THE YEAR, WITH BOARD.

LOCALITY.	Unit	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Halifax.....	Month	15-18	15-18	15-18	15-18	15-18	15-18	18-25	18-25	18-25	18-25	18-25	18-25	18-25	18-25
	"											25-30	30-30	30-30	30-30
Sydney.....	"	20	20	20	20	20	20	20	20	25	25	30	35	35	35
Westville.....	"	15	15	15	16	16	17	17	18	18	20	22	22	24	25
<i>Prince Edward Isle:</i>															
Charlottetown....	"	12	13	14	15	16	17	18	19	20	22	23	24	25	25
<i>New Brunswick:</i>															
Fredericton.....	"	18	18	18	19	19	19	20	21	22	23	24	25	27	27
Moncton.....	"	18	18	20	20	20	20	20	20	24	24	24	24	24	26
Newcastle.....	Year..	400	400	400	400	400	500	500	500	500	500	500	500	600	600
<i>Quebec:</i>															
Montreal.....	Month	20	22	22	22	25	25	28	28	28	30	30	30	40	40
Sherbrooke.....	"	12	12	12	12	12	12	12	14	15	16	17	18	19	20
Sorel.....	"	20	20	20	35	35	35	35	35	35	35	35	35	35	30-35
<i>Ontario:</i>															
Chatham.....	Year..	300	300	300	300	300	300	300	275	300	300	350	350	350	350
Ottawa.....	Month	15	15	15	15	15	15	15	15	18	20	20	25	30	30
Stratford.....	"	15-18	15-18	15-18	15-18	15-18	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30	25-30
<i>Manitoba:</i>															
Brandon.....	Year..	265	265	265	265	280	280	280	280	275	275	274	275	300	250
Winnipeg.....	"	.....	.....	.....	.....	.....	.....	250-300	250-300	250-300	250-300	250-300	300-350	300-400	300-400
<i>Saskatchewan:</i>															
Moose Jaw.....	Month	20	20	20	20	20	20	20	20	20	20	25	25	30	25-30
Prince Albert.....	Year..	200	200	200	200	225	225	240	250	275	275	300	300	320	330

## EXPERIENCED HELP ENGAGED FROM SPRING TO FALL SEASON, WITH BOARD.

LOCALITY.	Unit	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Halifax.....	Month.	15-	15-	15-	15-	15-	15-	20-	20-	20-	20-	20-	20-	20-	20-
"	"	20	20	20	20	20	20	30	30	30	30	30	30	30	30
Sydney.....	"	24	24	24	24	24	24	24	24	30-	30	30	30	30	30
Westville.....	"	15	15	15	16	16	17	17	18	18	20	22	22	24	25
<i>Prince Edward Isle.:</i>															
Charlottetown...	"	15	15	15	16	16	17	17	20	22	22	22	24	25	25
<i>New Brunswick:</i>															
Fredericton.....	"	23	23	23	24	24	24	25	26	27	28	29	30	32	32
Moncton.....	"	22	22	24	24	24	24	24	24	26	26	26	26	26	30
Newcastle.....	Day...	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.50
<i>Quebec:</i>															
Montreal.....	Month.	20	22	22	22	25	25	25	28	28	30	30	30	40	45
Sherbrooke.....	"	18	18	18	18	18	18	18	13	14	26	27	28	29	30
Sorel.....	"	30	30	30	30	32	32	32	32	32	32	32	32	30-	40-
														32	50
<i>Ontario:</i>															
Chatham.....	Day...	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75
Ottawa.....	Month.	18-	18-	18-	18-	18-	18-	18-	18-	20	25	25	30	35	35
"	"	20	20	20	20	20	20	20	20						
Stratford.....	"	18-	18-	18-	18-	18-	30-	30-	30-	30-	30-	30-	30-	35-	35-
"	"	25	25	25	25	25	35	35	35	35	35	35	40	40	40
<i>Manitoba:</i>															
Brandon.....	Six Months	200	200	200	200	210	220	260	245	225	240	290	230	250	200
Winnipeg.....	Month.	25	25	25	25	25	25	25-	25-	25-	25-	25-	35-	35-	35-
"	"							30	30	30	30	30	40	45	45
<i>Saskatchewan:</i>															
Moose Jaw.....	"	20-	30	30	30	30	30-	30-	30-	30-	30-	35-	40-	45-	40-
"	"	25					35	35	35	35	35	40			
Prince Albert....	"	30	30	30	30	30	30	30	30	30	30	35	40	40	35-
"	"	40	40	40	40	40	40	40	40	40	40	45	50	60	45

## EXPERIENCED HELP WHEN ENGAGED DURING HARVESTING SEASON.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Halifax.....	Day..	1.25	1.25	1.25	1.25	1.25	1.25	1.35	1.35	1.35	1.35	1.35	1.35	1.25-	1.25-
Sydney.....	Month	16	16	16	16	16	16	16	16	20	20	20	20	20	20
Westville.....	Day..	0.60	0.60	0.60	0.65	0.65	0.65	0.70	0.70	0.75	0.80	1.00	1.00	1.25	1.25
<i>Prince Edw. Island:</i>															
Charlottetown...	Month	20	20	20	20	20	20	21	21	23	24	24	24	25	25
<i>New Brunswick:</i>															
Fredericton.....	Day..	1.15	1.15	1.15	1.20	1.20	1.20	1.25	1.25	1.30	1.40	1.50	1.50	1.75	1.75
Moncton.....	Day..	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.50	1.50	1.50	1.50	1.50-
Newcastle.....	Day..	1.25	1.25	1.25	1.25	1.25	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75
<i>Quebec:</i>															
Montreal.....	Day..	1.50	1.60	1.60	1.60	1.80	1.80	1.80	2.00	2.00	2.00	2.00	2.00	3.00-	3.00-
Sherbrooke.....	Month	28	28	28	28	28	28	28	44	45	46	47	48	49	50
Sorel.....	Month	30	30	30	30	30	32	32	32	32	32	32	32	30-	40-
														35	50
<i>Ontario:</i>															
Chatham.....	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Ottawa.....	Day..	1.75-	1.75-	1.75-	1.75-	1.75-	1.75-	1.75-	1.75-	1.00	1.25	1.50	1.75	2.00	2.00-
		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00						2.50
Stratford.....	Month	25-	25-	25-	25-	25-	40-	40-	40-	40-	40-	40-	40-	40-	40-
		40	40	40	40	40	60	60	60	60	60	60	60	60	60
<i>Manitoba:</i>															
Brandon.....	Month	30	30	30	40	40	40	50	50	40	40	50	50	55	45
Winnipeg.....	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00-	2.00-	2.00-	2.00-	2.00-	2.50-	2.50-	2.50-
								2.50	2.50	2.50	2.50	2.50	3.00	3.00	3.00
<i>Saskatchewan:</i>															
Moose Jaw.....	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.25	2.25	2.25	2.50	2.50	2.75	2.50
Prince Albert.....	Month	25	25	25	30	30	35	35	35	35	40	40	45	45	40
Saskatoon.....	Day..										2.00-	2.00-	2.50-	2.50-	
											2.50	3.00	3.50	3.50	
<i>Alberta:</i>															
Edmonton.....	Day..									2.00	2.00	2.00	2.50	2.50	2.50
Lethbridge.....	Day..												2.50-	2.50-	2.50-
													3.50	3.50	3.50



## INEXPERIENCED HELP WHEN ENGAGED DURING HARVESTING SEASON.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<i>Nova Scotia:</i>		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Westville.....	Day..	0.50	0.50	0.50	0.55	0.55	0.60	0.60	0.65	0.65	0.70	0.90	0.90	1.00	1.00
<i>New Brunswick:</i>															
Fredericton.....	Day..	0.75	0.75	0.75	0.75	0.75	0.75	0.80	0.80	0.85	0.90	0.95	1.00	1.25	1.25
Newcastle.....	Day..	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.50	1.50
Moncton.....	Day..	0.80	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.25	1.25	1.25-1.50
<i>Quebec:</i>															
Montreal.....	Day..	1.10	1.25	1.25	1.25	1.40	1.40	1.50	1.50	1.75	1.75	1.75	1.75	2.50	2.75-3.00
Sherbrooke.....	Month	15	15	15	15	15	15	15	22	22	22.50	23	23.50	24	25
Sorel.....	Month	23	24	24	24	24	24	25	25	25	25	25	25	23-25	25-35
<i>Ontario:</i>															
Chatham.....	Day..	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00	1.50-2.00	1.50-1.75
Ottawa.....	Day..	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75	1.75
Stratford.....	Month	12-15	12-15	12-15	12-15	12-15	12-20	12-20	12-20	12-20	12-20	12-20	12-25	12-25	12-30
<i>Saskatchewan:</i>															
Moose Jaw.....	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.25	2.25	2.25	2.25	2.50	2.75	2.50
Prince Albert.....	Month	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-25	15-25	15-25	15-25
Saskatoon.....	Month											1.50-2.00	1.50-2.00	1.50-2.50	2.50
<i>Alberta:</i>															
Edmonton.....	Day..									1.75	1.75	1.75	2.00	2.00	2.00
Lethbridge.....	Day..												2.25	2.25	2.25
													2.75	2.75	2.75

## (2) Fruit Farming.

## EMPLOYEES WITH SPECIAL KNOWLEDGE OF SPRAYING, PACKING, PRUNING, AND GENERAL FARM MANAGEMENT.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
<i>Nova Scotia:</i>		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Annapolis....	Day.....	1.50	1.50	1.50	1.50	1.50	1.50	1.50-1.75	1.50-1.75	1.50-1.75	1.50-1.75	1.50-2.00	1.50-2.00	1.50-2.00	1.50-2.00
Wolfville....	Day.....	1.25	1.25	1.25	1.25	1.25	1.35	1.35	1.35	1.50	1.50	1.50	1.50	1.50-2.00	1.50-2.00
<i>Prince Edward Island:</i>															
Georgetown..	Day (Including board.)	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.25	2.25	2.50	2.50	2.50	2.50
<i>New Brunswick:</i>															
Fredericton*	Day (Including Board)	1.50-2.00	1.50-2.00	1.50-2.00	1.50-2.00	1.50-2.00	1.75-2.25	1.75-2.25	1.75-2.25	1.75-2.25	1.75-2.25	1.75-2.25	2.00-2.50	2.00-2.50	2.00-2.50
<i>Quebec:</i>															
Hemmingford	Day.....	1.25	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	2.00	2.50	2.50	2.50
Montreal....	Year (Including Board)	240	240	240	240	240	180	180	200	200	200	200	220	230	250
<i>Ontario:</i>															
Burlington..	Day (Including Board.)	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75	2.00	2.25	2.50
Grimsby.....	Day.....	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	2.00
St. Thomas..	Month (Including Board.)	30	35	35	35	40	40	40	45	45	45	45	45	45	45
<i>British Columbia</i>															
Kelowna.....	Month (Including Board.)				25	25	30	35	40	40	45	45	45	50	55
Victoria.....	Day.....	1.75-2.00	1.75-2.00	1.75-2.00	2.00-2.25	2.00-2.25	2.00-2.25	2.00-2.25	2.25-2.50	2.25-2.50	2.25-2.50	2.50-3.00	2.50-3.00	2.50-3.00	2.50-3.00

\*Board is supplied only in a few cases.

†Immigrant Labour.

## PICKERS OF TREE FRUITS. (Except Cherries.)

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>Nova Scotia:</i>															
Annapolis....	Day.....	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50
<i>Prince Edward Island:</i>															
Georgetown..	Day.....	0.60	0.60	0.60	0.60	0.60	0.75	0.75	0.75	0.75	0.80	1.00	1.00	1.00	1.00
<i>New Brunswick:</i>															
Fredericton..	Day (Including Board)	1.00	1.00	1.00	1.00	1.00	1.10	1.10	1.20	1.30	1.40	1.40	1.50	1.60	1.60
<i>Quebec:</i>															
Hemmingford	Day.....	0.75	0.75	0.75	0.75	1.00	1.00	1.00	1.00	1.25	1.25	1.25	1.50	2.00	2.00-
Montreal....	Day.....	0.75 1.00	0.75 1.00	0.75 1.00	0.75 1.25	0.75 1.25	0.75 1.50	0.75 1.50	0.75 1.50	0.75 1.50	0.75 1.50	1.00 1.50	1.00 1.75	1.75 2.00	1.75 2.00
<i>Ontario:</i>															
Burlington..	Day.....	1.35	1.35	1.35	1.35	1.35	1.50	1.50	1.50	1.50	1.50	1.75	1.75	1.75	2.00
Grimsby.....	Day.....	1.25 1.50	1.50 1.75	1.50 1.75	1.50 1.75	1.50 1.75	1.50 1.75	1.50 1.75	1.50 1.75	1.50 2.00	1.75 2.00	1.75 2.00	2.00 2.00	2.00 2.00	2.00- 400*
St. Thomas..	Day.....	1.40	1.50	1.50	1.50	1.75	1.75	1.75	2.00	2.00	2.00	2.00	2.00	2.00	2.00
<i>British Columbia</i>															
Kelowna.....	Day.....	.....	1.50	1.50	1.50	1.75	1.75	1.75	2.00	2.00	2.00	2.25	2.25	2.50	2.25
Victoria.....	Day.....	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.25- 1.50	1.50- 1.75	1.50- 1.75	1.50- 1.75	1.50- 1.75	2.00 .....	2.00 .....	2.00 .....	2.00 .....	2.50 .....	2.25 .....

\*Wages per year including house.

## PICKERS OF SMALL FRUITS AND CHERRIES. (Women and Girls, except in British Columbia.)

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<i>New Brunswick:</i>															
Fredericton..	Quart Box (Straw- berries.) (Rasp- berries.)	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.01½ .02	.02 .02½	.02 .02½	.02 .02½	.02 .02½
<i>Quebec:</i>															
Montreal....	Day.....	0.60 0.75	0.60 0.75	0.60 0.75	0.60 0.75	0.60 0.75	0.60 1.00	0.60 1.00	0.60 1.00	0.60 1.00	0.60 1.00	0.75 1.00	0.75 1.00	0.75 1.00	1.00 1.25
<i>Ontario:</i>															
Grimsby.....	Quart Box Cherries, Straw- berries and Currants. Quart Box Cherries Quart Box Rasp- berries	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	.01 .01½ .02	*0.15 †0.20	*0.51 †0.20
St. Thomas..	Day.....	1.00	1.25	1.25	1.25	1.50	1.50	1.50	1.75	1.75	1.75	1.75	1.75	1.75	1.75
<i>British Columbia</i>															
Victoria.....	Day.....	1.25	1.25	1.25	1.25	1.50	1.50	1.50	1.50	2.00	2.00	2.00	2.00	2.00	2.00

\*11 Quart Basket of Currants.

†11 Quart Basket of Cherries.

## II.—FISHING.

## (1) Lobster Canneries.

FISHERMEN (boats, gear and bait supplied.)

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>New Brunswick:</i> New Mills...	Per month	35	....	35	....	35	....	35	....	38	....	38	....	38	....
<i>P. E. Island:</i> Charlottetown*	Per 100 lbs	.75	....	.80	....	.90	....	.90	....	1.00	....	1.00	....	1.25	....

\*Not included in index number

## SEALERS.

<i>Nova Scotia:</i> Halifax.....	Per month (with board)	30	....	30	....	30	....	30	....	30	....	35	....	35	....
<i>New Brunswick:</i> New Mills...	"	38	....	38	....	38	....	38	....	40	....	40	....	40	....
<i>P. E. Island:</i> Charlottetown	"	35	....	35	....	35	....	35	....	40	....	40	....	40	....

## PACKERS (Girls.)

<i>Nova Scotia:</i> Halifax.....	Per day...	.40	....	.40	....	.40	....	.40	....	.40	....	.45	....	.45	....
<i>New Brunswick:</i> New Mills...	"	.60	....	.60	....	.60	....	.60	....	.60	....	.60	....	.60	....
<i>P. E. Island:</i> Charlottetown	Per month with board	9	....	9	....	10	....	10	....	11	....	11	....	12	....

## GENERAL EMPLOYEES. (Men.)

<i>Nova Scotia:</i> Halifax.....	Per day...	1.00	....	1.00	....	1.00	....	1.00	....	1.00	....	1.00	....	1.00	....
<i>New Brunswick:</i> New Mills...	"	1.25	....	1.25	....	1.25	....	1.25	....	1.25	....	1.25	....	1.25	....
<i>P. E. Island:</i> Charlottetown	Per Month with board	18	....	20	....	20	....	20	....	20	....	25	....	25	....

## (2) Wholesale Fish Establishments.

## CURERS.

<i>Nova Scotia:</i> Digby.....	Per hour...	c	....	c	....	c	....	c	....	c	....	c	....	c	....
		\$	....	\$	....	\$	....	\$	....	\$	....	\$	....	\$	....
<i>Canso.....</i>	Per Month	35	....	35	....	35	....	35	....	35	....	40	....	40	....

## II.—FISHING.

## (1) Lobster Canneries.

FISHERMEN (Boats, gear and bait supplied.)—*Continued*

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>New Brunswick:</i> New Mills...	Per month.	38	.....	38	.....	40	.....	40	.....	40	.....	40	.....	40	.....
<i>P. E. Island:</i> Charlottetown*.	Per 100 lbs.	1.50	.....	1.50	.....	1.75	.....	2.00	.....	2.50	.....	3.50	.....	3.75	.....

\*Not included in index number.

SEALERS.—*Continued.*

<i>Nova Scotia:</i> Halifax.....	Per month with board	35	.....	35	.....	35	.....	40	.....	40	.....	40	.....	45	.....
<i>New Brunswick:</i> New Mills...	"	40	.....	40	.....	45	.....	45	.....	45	.....	45	.....	45	.....
<i>P. E. Island:</i> Charlottetown	"	45	.....	45	.....	50	.....	50	.....	50	.....	60	.....	60	.....

PACKERS (Girls)—*Continued.*

<i>Nova Scotia:</i> Halifax.....	Per day...	.45	.....	.50	.....	.50	.....	.65	.....	.75	.....	.75	.....	.80	.....
<i>New Brunswick:</i> New Mills...	"	.70	.....	.70	.....	.70	.....	.70	.....	.70	.....	.75	.....	.75	.....
<i>P. E. Island:</i> Charlottetown	Per month with board	12	.....	14	.....	15	.....	16	.....	16	.....	18	.....	20	.....

GENERAL EMPLOYEES (Men.)—*Continued.*

<i>Nova Scotia:</i> Halifax.....	Per day...	1.15	.....	1.15	.....	1.15	.....	1.15	.....	1.25	.....	1.25	.....	1.25	.....
<i>New Brunswick:</i> New Mills...	"	1.35	.....	1.35	.....	1.35	.....	1.35	.....	1.35	.....	1.50	.....	1.50	.....
<i>P. E. Island:</i> Charlottetown	Per Month with board	25 ✓	.....	26	.....	26	.....	26	.....	26	.....	35	.....	38	.....

## (2) Wholesale Fish Establishments.

CURERS.—*Continued.*

<i>Nova Scotia:</i> Digby.....	Per hour...	14-18	.....	14-18	.....	14-18	.....	17-18	.....	17-18	.....	17-20	.....	17-20	.....
		\$		\$		\$		\$		\$		\$		\$	
Canso.....	Per Month	40	.....	40	.....	40	.....	45	.....	45	.....	45	.....	45	.....

## (3) Salmon Fishermen, B.C.\*

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
British Columbia Fraser River.	Per fish†...	c		c		c		c		c		c		c	
		25- 25	..... .....	12½- 10	..... .....	20- 12½	..... .....	15- 14	..... .....	20- 20	..... .....	12½- 10	..... .....	25- 20	..... .....

\*Not included in index number.

†First figure, July price; second, August price.

## (4) Salmon Canneries.

## FOREMEN.

		\$		\$		\$		\$		\$		\$	
<i>British Columbia</i>	Per season.												
Fraser River.	(of 6 or 8 Months)	1,000	.....	1,000	.....	1,030	.....	1,030	.....	1,000	.....	1,000	.....
Skeena River	Per Month	.....		.....		.....		.....		.....		145	60
Rivers Inlet..	Per Month	.....		.....		.....		.....		.....		135	60

## CLERKS AND BOOK-KEEPERS\*

		70		70		70		70		70		70	
<i>British Columbia</i>		to		to		to		to		to		to	
Fraser River.	Per Month	100	.....	100	.....	100	.....	100	.....	100	.....	100	.....
Skeena River.	"	.....		.....		.....		.....		.....		60-95	60
Rivers Inlet..	"	.....		.....		.....		.....		.....		60-95	60

\*Lower figures: clerks; higher: book-keepers.

## CLEANERS AND WASHERS (Indians-female)

		c		c		c		c		c		c	
<i>British Columbia</i>													
Fraser River..	Per hour...	16	.....	16	.....	16	.....	16	.....	16	.....	20	54
Skeena River.	"	.....		.....		.....		.....		.....		15	54
Rivers Inlet..	"	.....		.....		.....		.....		.....		15	54

## PACKERS (Indians-female).

<i>British Columbia</i>													
Skeena River.	Per hour...	.....		.....		.....		.....		.....		25	54
Rivers Inlet..	"	.....		.....		.....		.....		.....		27	54



## (3) Salmon Fishermen, B.C.\*

LOCALITY.	Unit	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		c	Per wk.	c	Per wk.	c	Per wk.	c	Per wk.	c	Per wk.	c	Per wk.	c	Per wk.
British Columbia															
Fraser River	Per fish†.	25-20	.....	25-25	.....	12½-10	.....	25-25	.....	35-35	.....	35-35	.....	15-15	.....

\*Not included in index number.

†First figure, July price; second, August price.

## (4) Salmon Canneries.

FOREMEN.—Continued

		\$		\$		\$		\$		\$		\$		\$	
British Columbia	Per season.														
Fraser River.	(of 6 or 8 Months)	1,050	.....	1,100	.....	1,100	.....	1,100	.....	1,100	.....	1,100	.....	1,100	.....
Skeena River.	Per Month	145	60	145	60	145	60	150	60	150	60	150	60	150	60
Rivers Inlet.	Per Month	135	60	135	60	135	60	135	60	150	60	150	60	150	60

## CLERKS AND BOOK-KEEPERS.\*—Continued.

		70 to 100		70 to 100		70 to 100		70 to 100		70 to 100		70 to 100		70 to 100	
British Columbia															
Fraser River.	Per Month	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60
Skeena River.	"	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60
Rivers Inlet.	"	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60	60-95	60

\*Lower figures: clerks; higher: book-keepers.

## CLEANERS AND WASHERS. (Indians-female).—Continued.

		c		c		c		c		c		c		c	
British Columbia															
Fraser River.	Per hour...	20	54	20	54	20	54	20	54	20	54	20	54	20	54
Skeena River.	"	15	54	15	54	15	54	20	54	20	54	20	54	20	54
Rivers Inlet.	"	15	54	15	54	15	54	20	54	20	54	20	54	20	54

## PACKERS (Indians-female).—Continued.

		c		c		c		c		c		c		c	
British Columbia															
Skeena River.	Per hour...	25	54	25	54	25	54	30	54	30	54	30	54	30	54
Rivers Inlet.	"	27	54	27	54	27	54	30	54	30	54	30	54	30	54

## III.—LUMBERING.

## (1) In Logging Camps.

CHOPPERS (Fallers in B.C.)

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater...	Per day									1.25	60	1.25	60	1.25	60
<i>New Brunswick:</i> St. John River Valley.....	Per Month	25	60	26	60	26	60	27	60	27	60	28	60	30	60
<i>Quebec:</i> Metapedia River Valley.....	"	20-26	60	20-26	60	20-26	60	22-28	60	22-28	60	22-28	60	22-28	60
St. Maurice R. Valley.....	"	18		18		18-20		18-20		18-20		20		20	
<i>Ontario:</i> Georgian Bay District.....	"					24-28	60	26-30	60	26-30	60	26-32	60	26-32	60
Rainy River District.....	"	30	60	30	60	30	60	30	60	30	60	30	60	30	60
<i>Saskatchewan:</i> Prince Albert District...	Per Month													28	60
<i>British Columbia</i> Mountain Dis- trict.....	Per Month or per day	35				35	60	2.25	60	2.25- 2.50	60	35-40	60	2.25- 2.75	60

SAWYERS (Buckers in B. C.)

<i>Nova Scotia:</i> Bridgewater...	Per day									1.25	60	1.25	60	1.25	60
<i>New Brunswick:</i> St. John River Valley.....	Per Month	25	60	26	60	26	60	27	60	27	60	28	60	30	60
<i>Quebec:</i> Metapedia River Valley.....	"	20-26	60	20-26	60	20-26	60	20-26	60	22-28	60	22-28	60	22-28	60
St. Maurice River Valley	"	18-20	*	18-20	*	18-20	*	18-20	*	18-20	*	18-20	*	20	*
<i>Ontario:</i> Georgian Bay District.....	"					24-28	60	26-30	60	26-30	60	26-32	60	26-32	60
Rainy River District.....	"	30	60	30	60	30	60	30	60	30	60	30	60	30	60
<i>Saskatchewan:</i> Prince Albert District.....														26	60
<i>British Columbia</i> Mountain Dis- trict.....															

\*Daylight to dark.

## III.—LUMBERING.

## (1) In Logging Camps.

CHOPPERS (Fallers in B.C.)—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater..	Per day...	1.40	60	1.25	60	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60
<i>New Brunswick:</i> St. John River Valley.....	Per Month	30	60	32	60	33	60	33	60	35	60	35	60	35	60
<i>Quebec:</i> Metapedia River Valley.....	"	22-28	60	26-30	60	26-30	60	26-30	60	26-30	60	28-30	60	28-30	60
St. Maurice R. Valley.....	"	20	....	20-22	....	20-22	....	20-24	....	20-24	....	20-24	....	25-26	....
<i>Ontario:</i> Georgian Bay District.....	"	24-28	60	26-32	60	28-35	60	30-35	60	30-35	60	30-35	60	30-35	60
Rainy River District.....	"	35	60	35	60	35	60	35	60	35	60	35	60	30	60
<i>Saskatchewan:</i> Prince Albert District...	Per Month	30	60	35	60	35	60	35	60	35	60	45	60	45	60
<i>British Columbia:</i> Mountain District.....	Per Month or per day	2.50-3.00	60	2.10-3.00	60	2.00-3.00	60	2.50-3.00	60	2.50-3.00	60	40	60	40	60

SAWYERS (Buckers in B. C.)—Continued

<i>Nova Scotia:</i> Bridgewater..	Per day...	1.40	60	1.25	60	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60
<i>New Brunswick:</i> St. John River Valley.....	Per Month	30	60	32	60	33	60	33	60	35	60	35	60	35	60
<i>Quebec:</i> Metapedia River Valley.....	"	22-28	60	26-30	60	26-30	60	26-30	60	26-30	60	28-30	60	28-30	60
St. Maurice River Valley	"	20	*	20-22	*	20-22	*	20-22	*	22	*	22	*	25-26	*
<i>Ontario:</i> Georgian Bay District....	"	24-28	60	26-32	60	26-32	60	28-35	60	30-35	60	30-35	60	30-35	60
Rainy River District....	"	35	60	35	60	35	60	35	60	35	60	35	60	28	60
<i>Saskatchewan:</i> Prince Albert District.....	.....	28	60	30	60	35	60	35	60	35	60	40	60	40	60
<i>British Columbia:</i> Mountain District.....	.....	2.60-2.75	60	2.10-2.75	60	2.00-3.00	60	2.25-3.00	60	2.25-3.50	60	35	60	35	60

\*Daylight to dark.

**BOARD OF INQUIRY INTO**  
**ROAD CUTTERS (Swampers in B.C.)**

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater..	Per day...									1.25	60	1.25	60	1.25	60
<i>New Brunswick:</i> St John River Valley.....	Per Month	20	60	20	60	22	60	23	60	23	60	24	60	25	60
<i>Quebec:</i> Metapedia R. Valley.....	"	18-24	60	18-24	60	18-24	60	18-24	60	18-24	60	18-24	60	18-24	60
St. Maurice R. Valley.....	"	16-18		16-18		16-18		16-18		18		18		18	
<i>Ontario:</i> Georgian Bay District....	"					22-26	60	22-28	60	22-28	60	24-30	60	24-30	60
Rainy River District....	"	26	60	26	60	26	60	26	60	26	60	26	60	26	60
<i>Saskatchewan:</i> Prince Albert District....	Per Month													24	60
<i>British Columbia</i> Mountain Dis- trict.....	Per Month & per day					30	60	2.00- 2.25	60	2.00- 2.25	60	35	60	2.00- 2.50	60

**CHAINERS OR ROLLERS (Hook Tenders in B.C.)**

<i>Nova Scotia:</i> Bridgewater..	Per day...									1.25	60	1.25	60	1.25	60
<i>New Brunswick:</i> St John River Valley.....	Per Month	25	60	26	60	26	60	27	60	27	60	28	60	30	60
<i>Ontario:</i> Georgian Bay District....	Per Month					24-28	60	26-30	60	26-30	60	26-32	60	26-32	60
Rainy River District....	"	26	60	26	60	26	60	26	60	26	60	26	60	26	60
<i>Saskatchewan:</i> Prince Albert District....	"													26	60
<i>British Columbia</i> Mountain Dis- trict.....	Per day...							2.50	60	2.50	60	2.50- 2.75	60	2.25- 2.50	60

## ROAD CUTTERS (Swampers in B. C.)—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater..	Per day...	1.40	60	1.25	60	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60
<i>New Brunswick:</i> St John River Valley.....	Per Month	26	60	28	60	30	60	32	60	32	60	32	60	32	60
<i>Quebec:</i> Metapedia R. Valley.....	"	20-26	60	20-26	60	20-26	60	20-26	60	20-26	60	25-27	60	25-27	60
St. Maurice R. Valley.....	"	18	...	18	...	20	...	20	...	20	...	22	...	22	25
<i>Ontario:</i> Georgian Bay District....	"	22-26	60	24-30	60	24-30	60	26-30	60	28-32	60	30-35	60	30-35	60
Rainy River District....	"	30	60	30	60	30	60	30	60	30	60	30	60	26	60
<i>Saskatchewan:</i> Prince Albert District.....	Per Month	26	60	28	60	30	60	30	60	30	60	40	60	40	60
<i>British Columbia:</i> Mountain District.....	Per Month & per day	2.50-2.75	60	1.75-2.75	60	2.00-2.75	60	2.25-2.75	60	2.25-3.00	60	40	60	40	60

## CHAINERS OR ROLLERS (Hook Tenders in B. C.)—Continued.

<i>Nova Scotia:</i> Bridgewater..	Per day...	1.40	60	1.25	60	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60
<i>New Brunswick:</i> St John River Valley.....	Per Month	30	60	32	60	33	60	33	60	35	60	35	60	35	60
<i>Ontario:</i> Georgian Bay District....	Per Month	24-28	60	26-32	60	26-32	60	28-35	60	32-35	60	30-35	60	30-35	60
Rainy River District....	"	30	60	30	60	30	60	30	60	30	60	30	60	26	60
<i>Saskatchewan:</i> Prince Albert District....	"	28	60	35	60	35	60	35	60	35	60	40	60	40	60
<i>British Columbia:</i> Mountain District.....	Per day...	2.25-3.00	60	2.00-3.00	60	2.00-3.00	60	2.25-3.00	60	2.50-3.25	60	60	60	60	60



## COOKS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater...	Per day...									1.55		1.55		1.55	
<i>New Brunswick:</i> St. John River Valley.....	Per Month	30	60	30	60	32	60	35	60	35	60	38	60	40	60
<i>Quebec:</i> Metapedia R. Valley.....	"	40	84	40	84	40	84	40	84	40	84	40	84	40	84
St. Maurice R. Valley.....	"	30-35		30-35		30-35		30-35		30-35		35		35	
<i>Ontario:</i> Georgian Bay District....	"					55-60		55-60		55-60		60-65		60-65	
Rainy River District....	"	55		55		60		60		60		60		60	
<i>Saskatchewan:</i> Prince Albert District .....	"													75	
<i>British Columbia</i> Mountain District.....	"					60		60		60-75		60-80		65-80	

## (2) River Drivers.

<i>Nova Scotia:</i> Bridgewater...	Per day...									1.50	72	1.50	72	1.60	72
<i>New Brunswick:</i> St. John River Valley.....	" "	1.75	80	1.75	60	1.80	60	1.80	60	2.00	60	2.00	60	2.00	60
<i>Quebec:</i> Metapedia R. Valley.....	" "	1.00- 1.40		1.00- 1.50		1.00- 1.50		1.00- 1.50		1.00- 1.50		1.25- 1.75		1.25- 1.75	
St. Maurice R. Valley.....	" "	1.00- 1.40		1.00- 1.40		1.00- 1.40		1.00- 1.50		1.00- 1.50		1.00- 1.50		1.00- 1.50	
<i>Ontario:</i> Georgian Bay District....	Per Month					35-45		35-45		40-45		40-45		40-45	
Rainy River District....	" "	40	72	40	72	40	72	40	72	40	72	40	72	40	72
<i>Saskatchewan:</i> Prince Albert District.....	Per day...														
<i>British Columbia</i> Mountain District.....	Per Month											2.00- 2.50b	60	3.50	60

(b) Including board.

## COOKS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.	\$	Per wk.
<i>Nova Scotia:</i> Bridgewater.	Per day...	1.75	....	1.55	....	1.75	....	1.75	....	1.75	....	1.75	....	1.75	....
<i>New Brunswick:</i> St. John River Valley....	Per month	42	60	45	60	50	60	55	60	60	60	60	60	60	60
<i>Quebec:</i> Metapedia R. Valley....	"	40	84	40	84	50	84	50	84	50	84	50	84	50	84
St. Maurice R. Valley....	"	35	....	35	....	35	....	35	....	35	....	40	....	45	....
<i>Ontario:</i> Georgian Bay District....	"	60-65	....	60-70	....	65-70	....	70-75	....	70-80	....	70-85	....	70-85	....
Rainy River District....	"	65	....	65	....	65	....	65	....	65	....	65	....	60	....
<i>Saskatchewan:</i> Prince Albert District....	"	80	....	90	....	85	....	85	....	80	....	85	....	85	....
<i>British Columbia</i> Mountain District....	"	65-80	....	60-80	....	65-85	....	65-115	....	65-115	....	125	....	125	....

## (2) River Drivers.

<i>Nova Scotia:</i> Bridgewater..	Per day...	1.75	72	1.75	72	1.75	72	2.00	72	2.00	72	2.00	72	2.00	72
<i>New Brunswick:</i> St. John River Valley....	"	2.00	60	2.25	60	2.25	60	2.50	60	2.50	60	2.50	60	2.50	60
<i>Quebec:</i> Metapedia R. Valley....	"	1.25-1.75	....	1.25-1.75	....	1.50-2.00	....	1.50-2.00	....	1.50-2.00	....	1.50-2.00	....	1.50-2.00	60
St. Maurice R. Valley....	"	1.25-1.75	....	1.25-1.75	....	1.25-1.75	....	1.25-1.75	....	1.50-2.00	....	1.50-2.00	....	1.50-2.00	....
<i>Ontario:</i> Georgian Bay District....	Per month	35-45	....	40-45	....	40-45	....	40-50	....	40-50	....	40-50	....	40-50	....
Rainy River District....	" "	45	72	45	72	45	72	45	72	45	72	45	72	45	72
<i>Saskatchewan:</i> Prince Albert District....	Per day...	2.50	72	2.50	72	2.75	72	2.75	72	2.75	72	2.75	72	75*	60
<i>British Columbia</i> Mountain District....	Per month	2.50-3.75b	60	2.50-3.75b	60	3.50-3.75b	60	3.75-4.00	60	3.75-4.00	60	75*	40	.....	....

\*Per month.

(b) Including board.

## SURFACE EMPLOYEES.—(b) BANK AND SCREEN MEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist..	Day .....	1.25		1.40		1.40		1.40		1.40		1.60		1.60	
Spring Hill...	Day .....	1.05	10	1.40	10	1.40	10	1.40	10	1.40	10	1.40	10	1.40	10
		1.25		1.64		1.64		1.64		1.64		1.64		1.64	
<i>New Brunswick:</i>															
Grand Lake...	Day .....											2.00		2.00	
<i>Saskatchewan:</i>															
Souris District	Day .....													2.00	10
<i>Alberta:</i>															
Belly River Dist	Day .....	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10
Crows Nest & South Western Alberta Dist.	Day .....							1.80	10	1.80	10	2.00	10	2.00	10
<i>British Columbia</i>															
Vancouver Id.	Day .....	1.25	8	1.25	8	1.25	8	1.25	8	1.25	8	1.25	8	1.40	8

\*Chinese Labour.

## SURFACE EMPLOYEES.—(c) LABOURERS

<i>Nova Scotia:</i>															
Sydney Dist..	Day .....	1.25		1.40		1.40		1.40		1.40		1.60		1.60	
Joggins, Chignecto.....	Day .....	1.00		1.10		1.10		1.10		1.10		1.10		1.10	
		1.10	10	1.28	10	1.28	10	1.28	10	1.28	10	1.28	10	1.28	10
<i>New Brunswick:</i>															
Grand Lake...	Day .....											1.50		1.50	
<i>Saskatchewan:</i>															
Souris District	Day .....													2.00	10
<i>Alberta:</i>															
Belly River Dist	Day .....	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10	2.20	10
Crows Nest & South Western Alberta Dist.	Day .....							1.80	10	1.80	10	2.00	10	2.00	10
<i>British Columbia</i>															
Vancouver Id.	Day .....	1.25	9	1.25	9	1.25	9	1.25	9	1.25	9	1.25	9	1.25	9
		3.00		3.00		3.00		3.00		3.00		3.00		3.00	

\*Chinese Labour.

SURFACE EMPLOYEES.—(b) BANK AND SCREEN MEN.—*Continued.*

LOCALITY:	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist..	Day .....	1.60		1.60		1.60		1.65		1.70		1.70		1.70	
Spring Hill...	Day .....	1.40	10	1.40	10	1.40	10	1.40	10	1.52	10	1.52	10	1.52	10
		1.64		1.64		1.64		1.64		1.83		1.83		1.83	
<i>New Brunswick:</i>															
Grand Lake..	Day .....	2.00		2.00		2.00		2.00		2.00		2.00		2.00	
<i>Saskatchewan:</i>															
Souris District	Day .....	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
<i>Alberta:</i>															
Belly River Dist.	Day .....	2.40	10	2.40	10	2.25	10	2.25	10	2.25	10	2.47	10	2.47	10
Crows Nest & South Western															
Alberta Dist.	Day .....	2.25	10	2.25	10	2.25	10	2.25	10	2.47	10	2.47	10	2.47	10
<i>British Columbia</i>															
Vancouver Id.	Day .....	1.40	8	1.40	8	1.40	8	1.40	8	1.40	8	1.40*	8	1.40	8

\*Chinese Labour.

SURFACE EMPLOYEES.—(c) LABOURERS.—*Continued.*

<i>Nova Scotia:</i>															
Sydney Dist..	Day .....	1.60		1.60		1.60		1.65		1.70		1.70		1.70	
Joggins, Chignecto.....	Day .....	1.28	10	1.28	10	1.28	10	1.40	8	1.40	8	1.40	8	1.40	8
		1.28		1.28		1.28		1.50		1.50		1.50		1.50	
<i>New Brunswick:</i>															
Grand Lake..	Day .....	1.50		1.50		1.50		1.50		1.50		1.50		1.50	
<i>Saskatchewan:</i>															
Souris District	Day .....	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
<i>Alberta:</i>															
Belly River Dist.	Day .....	2.40	10	2.40	10	2.25	10	2.25	10	2.25	10	2.47	10	2.47	10
Crows Nest & South Western															
Alberta Dist.	Day .....	2.25	10	2.25	10	2.25	10	2.25	10	2.47	10	2.47	10	2.47	10
<i>British Columbia</i>															
Vancouver Id.	Day .....	*1.40- 1.65 3.50	9	1.40- 1.65 3.50	9	1.40- 1.65 2.50	9	1.40- 1.65 3.50	9	1.40- 1.65 3.50	9	1.40- 1.65 3.50	9	1.40- 1.65 3.50	9

\*Chinese Labour.

[illegible][illegible][illegible]





## UNDERGROUND EMPLOYEES.—(a) HAND PICK MEN.

LOCALITY.	Unit	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist.	Day	2.25	8	2.25	8	2.45	8	2.45	8	2.45	8	2.50	8	2.65	8
Spring Hill	Day	2.27		2.51		2.63		2.88		2.98		2.97		3.18	
<i>New Brunswick:</i>															
Grand Lake	Day											2.00		2.00	
												2.50		2.50	
<i>Saskatchewan:</i>															
Souris District	Day														
<i>Alberta:</i>															
Belly River Dist	Day	2.80		2.80		2.80		2.80		2.80		2.80		2.80	
CrowsNestPass andSouthWest ern Alberta Dist	Day							3.00		3.00		3.00		3.00	
<i>British Columbia</i>															
Vancouver Id.	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8

## UNDERGROUND EMPLOYEES\*—(b) MACHINE MINERS.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	2.85		3.00		3.15		3.15		3.25		3.25		3.50	
<i>Saskatchewan:</i>															
Souris District	Day														
<i>Alberta:</i>															
Belly River Dist	Day	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10
CrowsNestPass andSouthWest ern Alberta Dist	Day														
<i>British Columbia</i>															
Vancouver Id.	Day											3.00	8	3.50	8
												3.50			

\*None employed before 1905

## UNDERGROUND EMPLOYEES—(c) DRIVERS.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.25		1.45		1.45		1.45		1.45		1.45		1.45	
Spring Hill	Day	0.60	10	0.73	10	0.73	10	0.73	10	0.73	10	0.73	10	0.73	10
		1.25		1.52		1.52		1.52		1.52		1.52		1.52	
<i>Saskatchewan:</i>															
Souris District	Day													2.00	10
<i>Alberta:</i>															
Belly River Dist	Day	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10
CrowsNestPass andSouthWest ern Alberta Dist	Day							2.50	8	2.50	8	2.50	8	2.50	8
<i>British Columbia</i>															
Vancouver Id.	Day	2.50	8	2.50	8	2.50	8	2.50	8	2.50	8	2.50	8	2.50	8

Note on Hours in N.S. —No 8 hour law, but miners and underground employees usually work 8 hours.

UNDERGROUND EMPLOYEES.—(a) HAND PICK MEN.—*Continued.*

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist.	Day	3 05	8	3 05	8	3 20	8	3 20	8	3 20	8	3 40	8	3 40	8
Spring Hill	Day	3 14		3 00		3 04		*		2 40		2 41		2 34	
										3 00		3 25		3 31	
<i>New Brunswick:</i>															
Grand Lake	Day	2 00		2 00		2 00		2 00		2 00		2 00		2 00	
		2 50		2 50		2 50		2 50		2 50		2 50		2 50	
<i>Saskatchewan:</i>															
Souris District	Day	2 50		2 50		2 50		2 50		2 50		2 50		2 50	
<i>Alberta:</i>															
Belly River Dist	Day	3 00		3 00		3 00		3 00		3 00		3 30		3 30	
Crows Nest Pass and South West- ern Alberta Dist	Day	3 00		3 00		3 00		3 00		3 30		3 30		3 30	
<i>British Columbia</i>															
Vancouver Id.	Day	3 30	8	3 30	8	3 30	8	3 30	8	3 30	8	3 30	8	3 30	8

\*Strike.

UNDERGROUND EMPLOYEES\*—(b) MACHINE MINERS.—*Continued.*

<i>Nova Scotia:</i>															
Sydney Dist.	Day	3 80		4 00		4 00		4 00		4 15		4 15		4 15	
<i>Saskatchewan:</i>															
Souris District	Day†			5 30		5 30		5 30		5 30		5 30		5 30	
				9 61		9 61		9 61		9 61		9 61		9 61	
<i>Alberta:</i>															
Belly River Dist	Day	3 00	8	3 00	8	3 50	8	3 50	8	3 50	8	3 75	8	3 75	8
Crows Nest Pass and South West- ern Alberta Dist	Day			3 50		3 50		3 50		3 75		3 75		3 75	
<i>British Columbia</i>															
Vancouver Id.	Day	3 57	8	3 57	8	3 57	8	3 57	8	3 57	8	3 30	8	3 30	8
		3 85		3 85		3 85		3 85		3 85		3 85		3 85	

\*None employed before 1905

†Season short; earnings exceptionally high.

UNDERGROUND EMPLOYEES—(c) DRIVERS.—*Continued.*

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1 50		1 50		1 50		1 50		1 55		1 60		1 70	
Spring Hill	Day	0 73	10	0 73	10	0 73	10	0 73	10	1 52	10	1 52	10	1 52	10
		1 52		1 52		1 52		1 52		1 65		1 65		1 65	
<i>Saskatchewan:</i>															
Souris District	Day	2 00	10	2 00	10	2 00	10	2 00	10	2 00	10	2 25	10	2 25	10
<i>Alberta:</i>															
Belly River Dist	Day	2 75	8	2 75	8	2 75	8	2 75	8	2 75	8	3 03	8	3 03	8
Crows Nest Pass and South West- ern Alberta Dist	Day	2 75	8	2 75	8	2 75	8	2 75	8	3 03	8	3 03	8	3 03	8
<i>British Columbia</i>															
Vancouver Id.	Day	2 86	8	2 86	8	2 86	8	2 86- 3 02	8	2 86- 3 02	8	2 86- 3 02	8	2 86- 3 02	8

Note re Hours in N.S.—No 8 hour law, but miners and underground employees usually work 8 hours.

## UNDERGROUND EMPLOYEES.—(d) BRATTICEMEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.50		1.50		1.65		1.65		1.65		1.65		1.65	
Spring Hill	Day	1.35	10	1.52	10	1.52	10	1.52	10	1.52	10	1.52	10	1.52	10
				1.64		1.64		1.64		1.64		1.64		1.64	
<i>Alberta:</i>															
Belly River Dist	Day					2.80	10	2.80	10	2.80	10	2.80	10	2.80	10
CrowsNestPass andSouthWest- ern Alberta Dist	Day							3.00	8	3.00	8	3.00	8	3.00	8
<i>British Columbia</i>															
Vancouver Is.	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8

## UNDERGROUND EMPLOYEES.—(e) TIMBERMEN.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.50		1.50		1.65		1.65		1.65		1.65		1.65	
Spring Hill	Day	1.35	10	1.77	10	1.77	10	1.77	10	1.77	10	1.77	10	1.77	10
		1.75													
<i>Saskatchewan:</i>															
Souris District	Day													2.50	10
<i>Alberta:</i>															
Belly River Dist	Day	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10	2.80	10
CrowsNestPass and SouthWest- ern Alberta Dist	Day							3.00	8	3.00	8	3.00	8	3.00	8
<i>British Columbia</i>															
Vancouver Is.	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8

## UNDERGROUND EMPLOYEES.—(f) LABOURERS.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.25		1.40		1.40		1.40		1.40		1.60		1.60	
Spring Hill	Day	1.25	10	1.40	10	1.40	10	1.40	10	1.40	10	1.40	10	1.40	10
				1.52		1.52		1.52		1.52		1.52		1.52	
<i>Saskatchewan:</i>															
Souris District	Day													2.00	10
<i>Alberta:</i>															
Belly River Dist	Day														
CrowsNestPass andSouthWest- ern Alberta Dist	Day							2.50	8	2.50	8	2.50	8	2.50	8
<i>British Columbia</i>															
Vancouver Is.	Day	*1.00- **2.75	8	1.50- 2.75	8	1.50- 2.75	8	1.50- 2.75	8	1.50- 2.75	8	1.50- 2.75	8	1.50 2.75	8

\*Chinese Labour.

\*\*White Labour.

## UNDERGROUND EMPLOYEES.—(d) BRATTICEMEN.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.75		1.75		1.75		1.75		1.80		1.85		1.88	
Spring Hill	Day	1.52	10	1.52	10	1.52	10	1.52	10	1.75	10	1.75	10	1.75	10
		1.64		1.64		1.64		1.64		2.00		2.00		2.00	
<i>Alberta:</i>															
Belly River Dist	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.30	8	3.30	8
CrowsNestPass andSouthWest- ern Alberta Dist	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.30	8	3.30	8	3.30	8
<i>British Columbia</i>															
Vancouver Is.	Day	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8

## UNDERGROUND EMPLOYEES.—(e) TIMBERMEN.—Continued.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.75		1.75		1.75		1.75		1.80		1.85		2.00	
Spring Hill	Day	1.77	10	1.77	10	1.77	10	1.77	10	1.52	10	1.52	10	1.52	10
										1.80		1.80		1.80	
<i>Saskatchewan:</i>															
Souris District	Day	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10
<i>Alberta:</i>															
Belly River Dist	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.30	8	3.30	8
CrowsNestPass and South West- ern Alberta Dist	Day	3.00	8	3.00	8	3.00	8	3.00	8	3.30	8	3.30	8	3.30	8
<i>British Columbia</i>															
Vancouver Is.	Day	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8	3.30	8

## UNDERGROUND EMPLOYEES.—(f) LABOURERS.—Continued.

<i>Nova Scotia:</i>															
Sydney Dist.	Day	1.60		1.60		1.70		1.70		1.75		1.75		1.75	
Spring Hill	Day	1.40	10	1.40	10	1.40	10	1.40	10	1.52	10	1.52	10	1.52	10
		1.52		1.52		1.52		1.52							
<i>Saskatchewan:</i>															
Souris District	Day	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10	2.25	10
<i>Alberta:</i>															
Belly River Dist	Day					2.50	8	2.50	8	2.50	8	2.75	8	2.75	8
CrowsNestPass andSouthWest- ern Alberta Dist	Day	2.50	8	2.50	8	2.50	8	2.50	8	2.75	8	2.75	8	2.75	8
<i>British Columbia</i>															
Vancouver Is.	Day	*1.75- **3.30	8	1.75- 3.30	8	1.75 3.30	8	1.75- 3.30	8	1.75- 3.30	8	1.75- 3.30	8	1.75- 3.30	8

\*Chinese Labour.

\*\*White Labour.



## (2) Metal Mines.

## SURFACE EMPLOYEES.—(a) COMPRESSOR MEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:</i>		\$		\$		\$		\$		\$		\$		\$	
Guysboro Dist.	Day														
<i>Quebec:</i>															
Eustis Dist.	"	1.35	10	1.35	10	1.35	10	1.50	10	2.00	10	2.00	10	2.00	10
<i>Ontario:</i>															
Sudbury Dist.	"											2.50	10	2.50	10
Cobalt Dist.	"							2.85	12	2.85	12	2.85	12	2.85	12
<i>British Columbia</i>															
Rosland Dist.	"	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8
Coast Dist.	"											3.50	8	3.50	8

## SURFACE EMPLOYEES. (b) BLACKSMITHS.

<i>Nova Scotia:</i>															
Guysboro Dist.	Day														
<i>Quebec:</i>															
Eustis Dist.	"	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
<i>Ontario:</i>															
Sudbury Dist.	"											2.25	10	2.25	10
Cobalt Dist.	"							2.50— 3.00	10	2.50— 3.00	10	2.50— 3.00	10	2.50— 3.00	10
<i>British Columbia</i>															
Rosland Dist.	"	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9
Coast Dist.	"	3.50	9	3.50	9	3.50	9	4.00	9	4.00	9	4.00	9	4.00	9

## SURFACE EMPLOYEES.—(c) MACHINISTS.

<i>Nova Scotia:</i>															
Guysboro Dist.	Day														
<i>Quebec:</i>															
Eustis Dist.	"	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
<i>Ontario:</i>															
Sudbury Dist.	"											2.75	10	2.75	10
Cobalt Dist.	"							2.50	10	2.50	10	2.50	10	2.50	10
<i>British Columbia</i>															
Rosland Dist.	"	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9
Coast Dist.	"	3.50	9	3.50	9	3.50	9	4.00	9	4.00	9	4.00	9	4.00	9

## (2) Metal Mines.

SURFACE EMPLOYEES.—(a) COMPRESSOR MEN.—Continued.

LOCALITY.	Unit	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i> Guysboro Dist.	Day							1.80	9	1.85	9	1.65	10	2.00	9
												2.00	9		
<i>Quebec:</i> Eustis Dist.	"	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10
<i>Ontario:</i> Sudbury Dist.	"	3.00	12	3.00	12	3.00	12	3.30	12	2.70	12	3.25	8	3.00	12
Cobalt Dist.	"	3.60	12	3.60	12	3.60	12	3.60	12	3.60	12	3.60	12	3.60	12
<i>British Columbia</i> Rossland Dist.	"	4.25	8	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8
Coast Dist.	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.75	8	3.75	8

SURFACE EMPLOYEES.—(b) BLACKSMITHS.—Continued.

<i>Nova Scotia:</i> Guysboro Dist.	Day							1.85	9	1.85	9	2.10- 2.00	10 9	2.00	9
<i>Quebec:</i> Eustis Dist.	"	2.00	10	2.25	10	2.25	10	2.50	10	2.50	10	2.50	10	2.50	10
<i>Ontario:</i> Sudbury Dist.	"	2.75	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	9	3.33	9
Cobalt Dist.	"	3.25- 3.75	10	3.25- 3.75	10	3.25- 3.75	10	3.25- 3.75	10	3.25- 3.75	10	3.25- 3.75	10	3.25- 3.75	
<i>British Columbia</i> Rossland Dist.	"	4-4.25	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9
Coast Dist.	"	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9

SURFACE EMPLOYEES.—(c) MACHINISTS.—Continued.

<i>Nova Scotia:</i> Guysboro Dist.	Day							2.25	9	2.25	9	2.00- 2.50	10 9	2.50	9
<i>Quebec:</i> Eustis Dist.	"	65 p m	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.75	10
<i>Ontario:</i> Sudbury Dist.	"	2.75	10	2.75	10	3.00	10	3.00	10	3.25	10	3.50	10	3.69	9
Cobalt Dist.	"	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	9
<i>British Columbia</i> Rossland Dist.	"	4-4.25	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9
Coast Dist.	"	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9

\$65.00 per month.

## SURFACE EMPLOYEES.—(d) CARPENTERS.

LOCALITY.	Unit	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i> Guysboro Dist. Day	Day														
<i>Quebec:</i> Eustis Dist...	"	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist.	"							2.50	10	2.50	10	2.50	10	2.50	10
Cobalt Dist...	"														
<i>British Columbia</i> Rossland Dist.	"	3.50	9	3.50	9	3.50	9	3.50	9	3.50	9	3.50	9	3.50	9
Coast Dist...	"	3.50	9	3.50	9	3.50	9	3.00	9	4.00	9	4.00	9	4.00	9

## SURFACE EMPLOYEES.—(e) GENERAL SURFACE LABOUR.

<i>Nova Scotia:</i> Guysboro Dist. Day	Day									1.25- 1.40	10				
<i>Quebec:</i> Eustis Dist...	"	1.20	10	1.20	10	1.20	10	1.20	10	1.25	10	1.25	10	1.35	10
<i>Ontario:</i> Sudbury Dist.	"											1.50	10	1.50	10
Cobalt Dist...	"							1.50	10	1.50	10	1.50	10	2.25	10
<i>British Columbia</i> Rossland Dist.	"	2.50	9	2.50	9	2.50	9	2.50	9	2.50	9	2.50- 2.75	9	2.75- 3.00	9
Coast Dist...	"	2.50	9	2.50	9	2.50	9	3.00	9	3.00	9	3.00	9	3.00	9

## UNDERGROUND EMPLOYEES.—(a) MACHINE MEN

<i>Nova Scotia:</i> Guysboro Dist. Day	Day														
<i>Quebec:</i> Eustis Dist...	"	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist.	"											2.50	10	2.50	10
Cobalt Dist...	"							2.50	10	2.50	10	2.50	10	2.50	10
<i>British Columbia</i> Rossland Dist.	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8
Coast Dist...	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8

1903 to 1906 board included.

## UNDERGROUND EMPLOYEES.—(b) HAND STEEL MINERS.

<i>Nova Scotia:</i> Guysboro Dist. Day	Day														
<i>Quebec:</i> Eustis Dist...	"	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist.	"											1.75	10	1.75	10
Cobalt Dist...	"							2.50	10	2.50	10	2.50	10	2.50	10
<i>British Columbia</i> Rossland Dist.	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8
Coast Dist...	"	3.00	8	3.00	8	3.00	8	3.00	8	3.50	8	3.50	8	3.50	8

## SURFACE EMPLOYEES.—(d) CARPENTERS.—Continued

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i> Guysboro Dist. Day.....								1.85	9	2.00	9	2.25	9	2.25	9
<i>Quebec:</i> Eustis Dist. . . . .	"	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10
<i>Ontario:</i> Sudbury Dist. . . . .	"	2.50	10	3.50	10	3.50	10	3.50	10	3.50	10	3.50	10	3.50	10
Cobalt Dist. . . . .	"	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	9
<i>British Columbia</i> Rossland Dist. . . . .	"	3.50-													
Coast Dist. . . . .	"	4.00	9	3.50	9	3.50	9	3.50	9	3.50	9	3.75	9	3.75	9
		3.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9	4.00	9

## SURFACE EMPLOYEES.—(e) GENERAL SURFACE LABOUR.—Continued.

<i>Nova Scotia:</i> Guysboro Dist. Day.....								1.25	9	1.25	9	1.50	9	1.50	9
<i>Quebec:</i> Eustis Dist. . . . .	"	1.35	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10
<i>Ontario:</i> Sudbury Dist. . . . .	"	1.75	10	1.75	10	1.75	10	1.75	10	2.00	9	2.00	10	2.02½	9
Cobalt Dist. . . . .	"	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.25	9
<i>British Columbia</i> Rossland Dist. . . . .	"	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9
Coast Dist. . . . .	"	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9	3.00	9

## UNDERGROUND EMPLOYEES.—(a) MACHINE MEN.—Continued

<i>Nova Scotia:</i> Guysboro Dist. Day.....												1.75	10		
<i>Quebec:</i> Eustis Dist. . . . .	"	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist. . . . .	"	2.75	10	2.75	10	2.75	20	2.75	10	2.75	10	3.00	8	3.00	8
Cobalt Dist. . . . .	"	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	9
<i>British Columbia</i> Rossland Dist. . . . .	"	4.00*	8	3.50	8	3.50	8	3.50	8	3.50	8	3.75	8	3.50	8
Coast Dist. . . . .	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8

\*July to November.

## UNDERGROUND EMPLOYEES.—(b) HAND STEEL MINERS.—Continued

<i>Nova Scotia:</i> Guysboro Dist. Day.....								1.50	10	1.50	10	1.65	10	1.75	10
<i>Quebec:</i> Eustis Dist. . . . .	"	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist. . . . .	"	2.10	10	2.10	10	2.10	10	2.10	10	2.25	10	2.50	8	2.56	8
Cobalt Dist. . . . .	"	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	9
<i>British Columbia</i> Rossland Dist. . . . .	"	4.00*	8	3.50	8	3.50	8	3.50	8	3.50	8	3.75	8	3.50	8
Coast Dist. . . . .	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8

\*July to November.

## UNDERGROUND EMPLOYEES—(c) MUCKERS AND SHOVELLERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:</i> Guysboro Dist.	Day	\$		\$		\$		\$		\$		\$			
<i>Quebec:</i> Eustis Dist.	"	1.25	10	1.25	10	1.25	10	1.25	10	1.35	10	1.35	10	1.40	10
<i>Ontario:</i> Sudbury Dist.	"											1.75	10	1.75	10
Cobalt Dist.	"							1.75	10	1.75	10	1.75	10	1.75	10
<i>British Columbia</i> Rossland Dist.	"	2.50	8	2.50	8	2.50	8	2.50	8	2.50	8	2.75	8	3.00	8
Coast Dist.	"	2.50	8	2.50	8	2.50	8	2.50	8	3.00	8	3.00	8	3.00	8

## UNDERGROUND EMPLOYEES.—(d) TIMBERMEN

<i>Nova Scotia:</i> Guysboro Dist.	Day														
<i>Quebec:</i> Eustis Dist.	"	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10
<i>Ontario:</i> Sudbury Dist.	"											2.50	10	2.75	10
Cobalt Dist.	"							2.50	10	2.50	10	2.50	10	2.50	10
<i>British Columbia</i> Rossland Dist.	"	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8
Coast Dist.	"														

1903 to 1906 board included.

## (3) Stone Quarries.

## DRILLERS.

<i>Nova Scotia:</i> Pictou	Day	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10	2.25	10	2.25	10
<i>New Brunswick:</i> Sackville	"	1.40	10	1.40	10	1.50	10	1.50	10	1.50	10	1.50	10	1.60	10
<i>Quebec:</i> Hull	"	1.25	11	1.25	11	1.25	11	1.35	11	1.35	11	1.50	10	1.75	10
<i>Ontario:</i> Toronto*	"													1.75	10
<i>Manitoba:</i> Winnipeg	"	2.00	10	2.00	10	2.25	10	2.25	10	2.25	10	2.25	10	2.50	10
<i>British Columbia</i> Vancouver	"	2.50	10	2.50	10	2.50	10	3.00	10	3.00	9	3.00	9	3.00	9

\*Eight hours on Saturday.



## UNDERGROUND EMPLOYEES.—(c) MUCKERS AND SHOVELLERS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Nova Scotia:															
Guysboro Dist.	Day . . . . .							1.40	10	1.40	10	1.50	10	1.50	10
Quebec:															
Eustis Dist.	"	1.40	10	1.40	10	1.50	10	1.50	10	1.50	10	1.60	10	1.60	10
Ontario:															
Sudbury Dist.	"	2.10	10	2.10	10	2.10	10	2.10	10	2.25	10	2.25	8	2.25	8
Cobalt Dist.	"	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	9
British Columbia															
Roseland Dist.	"	2.75-3 3.25*	8	3.00	8	3.00	8	3.00	8	3.00	8	3.25	8	3.00	8
Coast Dist.	"	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8	3.00	8

\*July to November.

## UNDERGROUND EMPLOYEES.—(d) TIMBERMEN.—Continued

Nova Scotia:															
Guysboro Dist.	Day . . . . .											2.00	10		
Quebec:															
Eustis Dist.	"	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10
Ontario:															
Sudbury Dist.	"	2.75	10	2.75	10	2.75	10	2.75	10	3.00	10	3.00	9	3.00	8
Cobalt Dist.	"	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	10	3.25	9
British Columbia															
Roseland Dist.	"	1.00*	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8	3.50	8
Coast Dist.	"											3.50	8	3.50	8

\*July till November.

## (3) Stone Quarries.

## DRILLERS.—Continued.

Nova Scotia:															
Pictou . . . . .	Day . . . . .	2.00	10	2.50	10	2.25	10	2.25	10	2.25	10	2.00	10	2.00	10
New Brunswick:															
Sackville . . . . .	"	1.70	10	1.70	10	1.70	10	1.75	10	1.80	10	1.80- 2.00	10	1.80- 2.00	10
Quebec:															
Hull . . . . .	"	1.75	10	1.90	10	1.90	10	2.00	10	2.00	10	2.10	10	2.25	10
Ontario:															
Toronto* . . . . .	"	1.90	10	2.00	10	2.00	10	2.00	10	2.00	10	2.40	10	2.50	10
Manitoba:															
Winnipeg . . . . .	"	2.50	10	2.50	10	2.50	10	2.50	10	2.75	10	2.75	10	2.50	10
British Columbia															
Vancouver . . . . .	"	3.00	9	3.00	8	3.50	8	3.50	8	3.50	8	3.50	8	3.75	8

\*Eight hours on Saturday.

## DERRICKMEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:</i>		\$		\$		\$		\$		\$		\$		\$	
Pictou.....	Day.....	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10
<i>New Brunswick:</i>															
Sackville.....	"	1.20	10	1.20	10	1.25	10	1.30	10	1.40	10	1.40	10	1.40	10
<i>Quebec:</i>															
Hull.....	"	1.25	11	1.25	11	1.25	11	1.35	11	1.35	10	1.50	10	1.75	10
<i>Ontario:</i>															
Toronto*.....														1.75	10
<i>Manitoba:</i>															
Winnipeg....	"	2.25	10	2.25	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10
<i>British Columbia</i>															
Vancouver....	"	2.50	10	2.50	10	2.50	10	3.00	9	3.00	9	3.00	9	3.00	9

\*8 hours Saturday.

## ORDINARY LABOURERS.

<i>Nova Scotia:</i>															
Pictou.....	Day.....	1.50	....	1.50	....	1.50	....	1.50	....	1.50	....	1.45	....	1.50	....
<i>New Brunswick:</i>															
Sackville.....	"	1.00	10	1.00	10	1.10	10	1.20	10	1.20	10	1.30	10	1.30	10
<i>Quebec:</i>															
Hull.....	"	1.20	11	1.20	11	1.20	11	1.25	11	1.25	10	1.25	10	1.30	10
<i>Ontario:</i>															
Toronto.....	"													1.50	10
<i>Manitoba:</i>															
Winnipeg....	"	1.75	10	1.75	10	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10
<i>British Columbia</i>															
Vancouver....	"	2.50	10	2.50	10	2.50	10	3.00	9	3.00	9	3.00	9	3.00	9

## (4) Smelters.

## CHARGERS.

<i>Ontario:</i>															
Sault Ste. Marie (iron)	Hour.....									.27½	12	.27½	12	.27½	12
Sudbury Dist. (copper)...	Day.....											3.00	12	3.00	12
<i>British Columbia</i>															
*Greenwood, (copper)...	"														
Trail.....	"														

\*See p. 582 and 583.

## DERRICKMEN.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:</i> Pictou.....	Day.....	1.50	10	1.50	10	1.50	10	1.50	10	1.60	10	1.50	10	.....	.....
<i>New Brunswick:</i> Sackville.....	"	1.60	10	1.60	10	1.60	10	1.60	10	1.60	10	1.60- 1.80	10	1.60- 1.70	10
<i>Quebec:</i> Hull.....	"	1.75	10	1.90	10	1.90	10	2.00	10	2.10	10	2.10	10	2.25	10
<i>Ontario:</i> Toronto*....	"	1.90	10	1.90	10	1.90	10	2.00	10	2.10	10	2.60	10	2.75	10
<i>Manitoba:</i> Winnipeg....	"	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	2.50	10	3.25	10
<i>British Columbia</i> Vancouver...	"	3.00	9	3.00	9	3.50	8	3.50	8	3.50	8	3.50	8	3.75	8

## ORDINARY LABOURERS.—Continued.

<i>Nova Scotia:</i> Pictou.....	Day.....	1.50	.....	1.50	.....	1.50	.....	1.50	.....	1.50	.....	1.50- 1.60	10	1.50- 1.60	10
<i>New Brunswick:</i> Sackville.....	"	1.40	10	1.40	10	1.40	10	1.40	10	1.50	10	1.50- 1.70	10	1.60	10
<i>Quebec:</i> Hull.....	"	1.35	10	1.35	10	1.45	10	1.45	10	1.50	10	1.75	10	2.00	10
<i>Ontario:</i> Toronto.....	"	1.75	10	1.60	10	1.60	10	1.60	10	1.70	10	1.70	10	1.90	10
<i>Manitoba:</i> Winnipeg....	"	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10
<i>British Columbia</i> Vancouver...	"	3.00	9	3.00	9	3.00	9	3.00	8	3.00	8	3.00	8	3.25	8

## (4) Smelters.

## CHARGERS.—Continued.

<i>Ontario:</i> Sault Ste. Marie (iron) Sudbury Dist. (copper)...	Hour..... Day.....	.27½	12	.27½	12	.27½	12	.27½	12	.27½	12	.27½	12	.27½	12
		3.60	12	3.60	12	3.60	12	3.60	12	3.60	12	3.60	12	3.60	12
<i>British Columbia</i> *Greenwood, (copper)...	"	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.00	8	4.00	8
Trail.....	"	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.25- 4.00	8	3.25- 4.00	.....

\*See p 582 and 583.

## CASTERS OR MOULDERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Ontario:</i>															
Sault Ste. Marie (iron)	Hour.....									.15		.15		.15	
Sudbury Dist. (copper)	Day.....									.17½	12	.17½	12	.17½	12
										1.98	12	1.98	12	1.98	12
<i>British Columbia</i>															
Trail.....	"														

## ORDINARY LABOURERS.

<i>Ontario:</i>															
Sault Ste. Marie (iron)	Hour.....									.15	10	.15	10	.15	10
Sudbury Dist. (copper)	Day.....											1.80	12	1.80	12
<i>British Columbia</i>															
*Greenwood, (copper)	Day.....									2.50	10				
Trail.....	"														

\*Rates at Greenwood for 1912-13 were those in force September 1st.—25 cents per day over the basic scale, the increased scale being given when price of copper is above 16 cents.

## V.—BUILDING.

## STONECUTTERS, (Lime and sandstone.)

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	25	60	25	60	25	60	25	60	25	60	25	60	25	60
<i>Nova Scotia:—</i>														
Halifax.....	30	60	30	60	36	60	36	60	36	60	36	54	36	54
<i>New Brunswick:—</i>														
St. John.....											30	54	30	54
<i>Quebec:—</i>														
Sherbrooke.....	25	59	30	59	30	59	30	59	30	59	35	59	35	59
Quebec.....	20	60	20	60	22½	54	22½	54	30	54	30	54	35	48
Montreal.....	30	60	30	60	33½	54	35	54	40	48	40	48	40	48
<i>Ontario:—</i>														
Ottawa.....	33½	50	33½	50	36	50	36	50	43	48	43	48	43	48
Toronto.....	43	44	43	44	43	44	45	44	48	44	48	44	48	44
Owen Sound.....	35	60	35	60	37½	54	37½	54	37½	54	37½	54	37½	54
<i>Manitoba:—</i>														
Winnipeg.....	50	53	50	53	52½	53	55	53	55	53	60	53	60	53
<i>Saskatchewan:—</i>														
Regina.....											50	54	50	54
<i>Alberta:—</i>														
Edmonton.....			55		55				55	54	55	54	60	48
Calgary.....	40		40		45		50	60	55	60	55	48	55	48
<i>British Columbia:—</i>														
Vancouver.....					45	45	45	44	50	44	62½	44	62½	44

CASTERS OR MOULDERS.—Continued

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Ontario:</i>		\$		\$		\$		\$		\$		\$		\$	
Sault Ste.		.15		.15		.15		.17½		.17½		.17½		.17½	
Marie (iron)	Hour.	.17½	12	.17½	12	.17½	12	.20	12	.20	12	.20	12	.20	12
Sudbury Dist.															
(copper)...	Day	2.10	12	2.10	12	2.10	12	2.10	12	2.28	12	2.40	12	2.40	12
<i>British Columbia</i>															
Trail.....	"											3.00	8	3.00	8

## ORDINARY LABOURERS.—Continued.

<i>Ontario:</i>															
Sault Ste.															
Marie (iron) .	Hour . . . . .	. 15	10	. 15	10	. 15	10	. 17½	10	. 17½	10	. 17½	10	. 17½	10
Sudbury Dis.															
(copper) . . .	Day . . . . .	1.80	12	1.92	12	1.92	12	1.92	12	2.10	12	2.40	12	2.40	12
<i>British Columbia</i>															
*Greenwood,															
(copper) . . .	Day . . . . .											2.75	8	2.75	8
Trail . . . . .												2.75	8	2.75	8

\*Rates at Greenwood for 1912-13 were those in force September 1st. —25 cents per day over the basic scale, the increased scale being given when price of copper is above 16 cents.

## V.—BUILDING.

STONECUTTERS, (Lime and sandstone.)—Continued.

[illegible]



## BRICKLAYERS.

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	25	60	25	60	25	60	25	60	25	60	25	60	25	60
<i>Nova Scotia:—</i>														
Halifax.....	36	54	36	54	36	54	36	54	36	54	36	54	40	54
<i>New Brunswick:—</i>														
St. John.....			33½	54	33½	54	33½	54	33½	54	33½	54	40	54
<i>Quebec:—</i>														
Sherbrooke.....	30	50	35	59	35	59	35	59	40	50	45	54	45	54
Quebec.....	30	60	30	60	33½	60	33½	60	33½	60	33½	60	44	54
Montreal.....	30	60	30	60	35	54	40	54	40	54	45	54	45	54
<i>Ontario:—</i>														
Ottawa.....			36	50	36	50	40	50	42	50	45	50	45	50
Toronto.....	37½	48	37½	48	42	48	45	44	45	44	47	44	50	44
Owen Sound.....	33½	60	33½	60	37½	54	37½	54	37½	54	37½	54	40	54
<i>Manitoba:—</i>														
Winnipeg.....	50	53	50	53	50	60	55	53	55	53	55	53	55	53
<i>Saskatchewan:—</i>														
Regina.....											50	60	50	60
<i>Alberta:—</i>														
Edmonton.....	50	59	50	59	50	59	55	54	55	54	55	54	60	48
Calgary.....			40	60	40	60	45	54	50	54	55	48	62½	48
<i>British Columbia:—</i>														
Vancouver.....			50	48	50	48	50	44	50	44	56½	44	62½	44

## ROUGH CARPENTERS.

<i>Prince Edward Island:—</i>														
Charlottetown.....	12½	60	12½	60	15	60	15	60	15	60	15	60	15	60
<i>Nova Scotia:—</i>														
Halifax.....	18	54	22	54	22	54	22	54	22	54	25	54	25	54
<i>New Brunswick:—</i>														
St. John.....	22½	54	22½	54	22½	54	22½	54	22½	54	22½	54	25	54
<i>Quebec:—</i>														
Sherbrooke.....	10	59	15	59	15	59	21½	59	21	50	22½	54	22½	54
Quebec.....	17½	60	20	60	20	60	20	60	20	60	20	60	22½	60
Montreal.....	17½	60	17½	60	20	60	22½	60	22½	54	27½	54	27½	54
<i>Ontario:—</i>														
Ottawa.....	22½	54	22½	54	22½	54	22½	50	22½	50	22½	50	25	50
Toronto.....	25	48	25	48	30	48	30	44	30	44	32½	44	32½	44
Owen Sound.....	20	60	20	60	20	60	20	60	20	60	20	60	25	60
<i>Manitoba:—</i>														
Winnipeg.....	25	60	25	60	25	60	35	53	35	53	35	53	35	58
<i>Saskatchewan:—</i>														
Regina.....											22½	60	27½	60
<i>Alberta:—</i>														
Edmonton.....	20	59	25	59	25	59	30	54	30	54	35	54	40	48
Calgary.....			27½	60	27½	54	35	54	35	54	35	54	35	54
<i>British Columbia:—</i>														
Vancouver.....	20½	60	33½	50	33½	50	40	44	40	44	40	44	43½	44

## BRICKLAYERS.—Continued.

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	25	60	30	60	30	60	30	60	30	60	32½	60	40	60
<i>Nova Scotia:—</i>														
Halifax.....	40	54	40	54	40	54	40	48	40	48	40	48	45	48
<i>New Brunswick:</i>														
St. John.....	40	54	40	54	40	54	45	54	45	54	45	54	55	48
<i>Quebec:—</i>														
Sherbrooke.....	45	54	45	54	50	54	55	54	55	54	50	54	50	54
Quebec.....	45	54	45	54	45	54	45	54	50	54	50	54	50	54
Montreal.....	50	54	50	54	50	54	50	54	50	54	55	54	55	54
<i>Ontario:</i>														
Ottawa.....	47	50	50	50	50	50	50	50	52	44	52	44	55	44
Toronto.....	50	44	50	44	50	44	50	44	52½	44	52½	44	55	44
Owen Sound.....	40	54	45	54	45	54	45	54	45	54	45	54	45	54
<i>Manitoba:—</i>														
Winnipeg.....	55	53	60	53	60	53	60	54	67½	53	70	53	70	48
<i>Saskatchewan:</i>														
Regina.....	55	54	55	54	55	54	60	54	60	54	70	53	70	53
<i>Alberta:</i>														
Edmonton.....	60	48	60	48	60	48	60	48	60	48	70	44	70	44
Calgary.....	62½	48	62½	48	62½	48	62½	48	67½	48	67½	44	70	44
<i>British Columbia:—</i>														
Vancouver.....	62½	44	62½	44	65	44	68½	44	75	44	75	44	75	44

## ROUGH CARPENTERS.—Continued.

<i>Prince Edward Island:—</i>														
Charlottetown.....	15	60	17½	60	17½	60	17½	60	17½	60	18J	60	20	60
<i>Nova Scotia:—</i>														
Halifax.....	25	54	25	54	27	54	30	54	30	54	32	54	35	54
<i>New Brunswick:—</i>														
St. John.....	27½	54	27½	54	27½	54	27½	54	33½	54	33½	54	37½	54
<i>Quebec:—</i>														
Sherbrooke.....	25	59	25	59	25	59	25	59	30	59	30	54	30	54
Quebec.....	22½	60	25	60	25	60	25	60	25	54	30	54	30	54
Montreal.....	27½	54	27½	54	30	54	30	54	35	54	40	54	42½	54
<i>Ontario:—</i>														
Ottawa.....	25	50	25	50	30	50	30	50	30	50	35	50	35	50
Toronto.....	33	44	33	44	33	44	35	44	37	44	40	44	45	44
Owen Sound.....	25	60	25	60	25	60	25	60	25	60	30	60	30	54
<i>Manitoba:—</i>														
Winnipeg.....	35	53	35	53	45	53	45	53	45	50	45	50	45	50
<i>Saskatchewan:—</i>														
Regina.....	35	60	35	60	35	60	40	59	40	59	40	53	40	53
<i>Alberta:—</i>														
Edmonton.....	42	48	42	48	42	48	43½	48	43½	48	40	44	40	44
Calgary.....	41	54	41	54	45	54	50	54	50	54	55	50	55	48
<i>British Columbia:</i>														
Vancouver.....	43½	44	43½	44	50	44	50	44	50	44	50	44	53½	44

## PAINTERS AND GLAZIERS.

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>														
Charlottetown.....	15	60	15	60	15	60	15	60	15	60	15	60	15	60
<i>Nova Scotia:—</i>														
Halifax.....	16	54	18½	54	18½	54	20½	54	20½	54	22½	54	22½	54
<i>New Brunswick:—</i>														
St. John.....					19	54	19½	54	22½	54	22½	54	25	54
<i>Quebec:—</i>														
Sherbrooke.....	15	59	17	59	17	59	17½	59	22½	59	22½	59	22½	59
Quebec.....	15	60	15	60	17½	60	17½	60	17½	60	17½	60	22½	60
Montreal.....	17½	60	17½	60	18½	60	22½	60	22½	54	22½	54	22½	54
<i>Ontario:—</i>														
Ottawa.....	22½	54	22½	54	22½	54	22½	50	22½	50	25	50	25	50
Toronto.....	22½	50	25	50	30	44	30	44	30	44	30	44	30	44
Owen Sound.....	17	60	17	60	20	60	20	60	20	60	20	60	22½	60
<i>Manitoba:—</i>														
Winnipeg.....	25	60	25	60	25	60	30	53	30	53	30	53	30	53
<i>Saskatchewan:—</i>														
Regina.....											25	60	25	60
<i>Alberta:—</i>														
Edmonton.....	25	59	25	59	25	59	30	54	30	54	36	54	40	48
Calgary.....									25	60	30	54	35	54
<i>British Columbia:—</i>														
Vancouver.....			33½	54	33½	54	37½	48	37½	48	37½	48	40	48

## PLUMBERS.

<i>Prince Edward Island:—</i>														
Charlottetown.....	20	60	20	60	20	60	20	60	20	60	20	60	20	60
<i>Nova Scotia:—</i>														
Halifax.....	20	54	22½	54	22½	54	22½	54	22½	54	22½	54	25	54
<i>New Brunswick:—</i>														
St. John.....			20	54	20	54	20	54	22½	54	22½	54	22½	54
<i>Quebec:—</i>														
Sherbrooke.....	20	59	20	59	20	59	20	59	20	59	20	59	20	59
Quebec.....	20	60	20	60	20	60	20	60	20	60	20	60	20	60
Montreal.....	18½	60	18½	60	25	60	25	60	25	54	25	54	30	54
<i>Ontario:—</i>														
Ottawa.....	20	54	22	54	25	54	25	50	27½	50	30	50	30	50
Toronto.....			27½	44	30	44	32½	44	32½	44	35	44	37½	44
Owen Sound.....	20	60	20	60	20	60	20	60	20	60	20	60	22½	60
<i>Manitoba:—</i>														
Winnipeg.....	30	60	40	51	40	54	40	48	40	48	40	48	45	48
<i>Saskatchewan:—</i>														
Regina.....											45	60	45	60
<i>Alberta:—</i>														
Edmonton.....					39	54	39	54	39	54	40	54	50	48
Calgary.....			30	60			32½	60	37½	60	40	54	45	50
<i>British Columbia:—</i>														
Vancouver.....			40	53½	40	53½	50	44	50	44	50	44	50	44

PAINTERS AND GLAZIERS. *Continued.*

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	15	60	17½	60	17½	60	17½	60	17½	60	20	60	20	60
<i>Nova Scotia:—</i>														
Halifax.....	22½	54	25	54	25	54	25	54	25	54	30	54	35	54
<i>New Brunswick:—</i>														
St. John.....	27½	54	27½	54	27½	54	27½	54	27½	54	33½	54	37½	48
<i>Quebec:—</i>														
Sherbrooke.....	22½	59	25	59	25	59	27½	59	27½	59	27½	59	27½	59
Quebec.....	22½	60	23	60	25	60	25	54	25	54	25	54	30	54
Montreal.....	25	54	25	54	25	54	27½	54	30	54	32½	54	35	54
<i>Ontario:—</i>														
Ottawa.....	25	50	25	50	27½	50	27½	50	30	50	30	50	33	50
Toronto.....	30	44	30	44	30	44	35	44	35	44	35	44	35	44
Owen Sound.....	22½	60	22½	60	22½	60	22½	60	22½	60	25	60	25	60
<i>Manitoba:—</i>														
Winnipeg.....	30	53	30	53	30	53	30	53	40	53	40	53	42½	53
<i>Saskatchewan:—</i>														
Regina.....	30	60	30	60	30	60	30	60	35	55	40	54	40	54
<i>Alberta:—</i>														
Edmonton.....	40	48	45	48	45	48	45	48	45	48	50	44	50	44
Calgary.....	40	54	40	54	40	54	45	50	45	50	50	49½	50	49½
<i>British Columbia:—</i>														
Vancouver.....	50	48	50	.....	50	.....	50	44	50	44	56½	44	56½	44

PLUMBERS.—*Continued.*

<i>Prince Edward Island:—</i>														
Charlottetown.....	20	60	20	60	20	60	20	60	20	60	25	60	30	60
<i>Nova Scotia:—</i>														
Halifax.....	25	54	25	54	25	54	30	50	30	50	35	50	35	50
<i>New Brunswick:—</i>														
St. John.....	22½	54	22½	54	25	54	25	54	28	54	35½	54	37½	48
<i>Quebec:—</i>														
Sherbrooke.....	22½	59	22½	59	22½	59	25	59	27½	59	27½	59	30	59
Quebec.....	22½	60	22½	60	22½	60	27½	60	27½	54	30	54	30	54
Montreal.....	32	54	32	54	32½	54	35	54	35	54	37½	54	40	54
<i>Ontario:—</i>														
Ottawa.....	32	50	36	50	36	50	39	50	39	50	39	50	44	48
Toronto.....	37½	44	37½	44	40	44	40	44	40	44	40	44	40	44
Owen Sound.....	22½	60	22½	60	22½	60	22½	60	22½	60	25	60	30	60
<i>Manitoba:—</i>														
Winnipeg.....	50	48	50	48	50	48	50	48	50	48	55	48	55	44
<i>Saskatchewan:—</i>														
Regina.....	40	54	45	54	50	54	50	54	50	54	55	50	55	50
<i>Alberta:—</i>														
Edmonton.....	55	48	56½	48	56½	48	56½	48	60	48	60	48	62½	48
Calgary.....	51	50	54	54	55	54	55	48	57½	48	60	44	60	44
<i>British Columbia:—</i>														
Vancouver.....	50	44	50	44	50	44	62½	44	62½	44	62½	44	62½	44

## BUILDERS' LABOURERS.

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	12½	60	12½	60	12½	60	12½	60	12½	60	12½	60	12½	60
<i>Nova Scotia:—</i>														
Halifax.....	13½	54	14	54	15	54	15	54	16½	54	16½	54	16½	54
<i>New Brunswick:—</i>														
St. John.....	16½	54	16½	54	16½	54	17½	54	17½	54	17½	54	17½	54
<i>Quebec:—</i>														
Sherbrooke.....	10	59	10	59	12	59	12½	59	13½	59	14	59	15	59
Quebec.....	12½	60	12½	60	15	60	15	60	15	60	16½	60	18½	60
Montreal.....	15	60	15	60	17½	60	17½	60	20	60	20	60	20	60
<i>Ontario:—</i>														
Ottawa.....	16½	54	16½	54	19	54	20	50	20	50	20	50	22	50
Toronto.....	22	44	23	44	23	44	25	44	25	44	25	44	25	44
Owen Sound.....	15	60	15	60	15	60	15	60	15	60	15	60	25	54
<i>Manitoba:—</i>														
Winnipeg.....	20	60	20	60	22	60	25	60	25	58	25	54	25	54
<i>Saskatchewan:—</i>														
Regina.....											20	60	20	60
<i>Alberta:—</i>														
Edmonton.....					20	60	20	60	20	60	25	48	25	48
Calgary.....			20	60							25-30	48	30-35	48
<i>British Columbia:—</i>														
Vancouver.....			30	54	30	54	34½	44	34½	44	34½	44		

## VI.—METAL.

## BLACKSMITHS.

LOCALITY.	Unit.		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>	Per		\$		\$		\$		\$		\$		\$		\$	
Dartmouth..	Week.	Wk.	8.00	54	8.00	54	8.00	54	9.00	54	10.00	54	10.00	54	10.00	54
NewGlasgow	Hour..	Wk.	.18½	57¼	.20	57¼	.20	57¼	.22½	57¼	.22½	57¼	.22.½	57¼	.25	57¼
<i>New Brunswick:</i>																
Fredericton..	Hour..	Wk.	.20	60	.20	60	.22	60	.22	60	.23	60	.24	60	.25	54
Sussex.....	Hour..	Wk.	*	....	*	....	.15	60	.15	60	.15	60	.16	60	.16	60
<i>Quebec:—</i>																
Cowansville..	Week.	Wk.	.....	....	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60
Montreal.....	Hour..	Wk.	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.22½	55
St. Hyacinthe	Week.	Wk.	.....	....	9.00	60	9.00	60	10.00	60	10.00	60	10.00	60	10.00	60
<i>Ontario:—</i>																
Brantford...	Hour..	Wk.	.17	60	.17	60	.17	60	.18	60	.18½	60	.18	60	.19	60
Dundas.....	Hour..	Wk.	19.5	55	19.5	55	20.5	55	19.7	55	20.4	55	20.4	55	20.8	55
Galt.....	Hour..	Wk.	16.25	55	16.25	55	17½26	55	20.22½	55	20.23½	55	20-25	55	20-27	55
Hamilton....	Hour..	Wk.	.22½	55	.22½	55	.22½	55	.24	55	.24	55	.25	55	.25	55
London.....	Hour..	Wk.	.18½	58	.18½	58	.19	58	.19	58	.19	55	.19½	55	.21	55
Ottawa.....	Day..	Dy.	.....	....	2.00	10	2.00	10	2.00	10	2.25	10	2.25	10	2.25	10
Stratford....	Hour..	Wk.	.17½	60	.17½	60	.17½	60	.17½	60	.17½	60	.20	59	.20	59
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.	*	....	*	....	*	....	.27½	60	.30	60	.30	60	.30	60
<i>Saskatchewan.</i>																
Regina.....	Hour..	Wk.	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....	.....	....
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.40	60	.40	60	.40	60	.40	60	.40	60	.40	60	.40	60
Vancouver...	Week.	Wk.	16.50	55	16.50	55	17.90	55	18.00	50	18.00	50	18.00	50	18.00	50
Victoria ....	Day..	Wk.	.....	....	.....	....	.....	....	.....	....	.....	....	3.50	54	3.50	54

\*No records.



## BUILDERS' LABOURERS.—Continued.

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk	Wages per hr	Hours per wk
<i>Prince Edward Island:—</i>	c		c		c		c		c		c		c	
Charlottetown.....	15	60	15	60	15	60	15	60	15	60	17½	60	17½	60
<i>Nova Scotia:—</i>														
Halifax.....	16½	54	19½	54	19½	54	19½	54	19½	54	22½	54	25	54
<i>New Brunswick:—</i>														
St. John.....	17½	54	17½	54	20	54	20	54	22½	54	22½	54	25	54
<i>Quebec:—</i>														
Sherbrooke.....	17½	59	17½	59	17½	59	17½	59	20	59	20	54	20	54
Quebec.....	20	60	20	60	20	60	20	54	20	54	25	54	25	54
Montreal.....	20	54	22½	54	22½	54	22½	54	25	54	28	54	30	54
<i>Ontario:—</i>														
Ottawa.....	25	50	25	50	25	50	25	50	28	44	30	44	30	44
Toronto.....	25	44	25	44	25	44	28	44	28	44	28	44	28	44
Oron Sound.....	25	54	25	54	25	54	25	54	25	54	27½	54	27½	54
<i>Manitoba:—</i>														
Winnipeg.....	25	54	25	54	25	54	25	54	27½	54	27½	54	27½	54
<i>Saskatchewan:—</i>														
Regina.....	20	60	20	60	20	60	20	60	20	60	30	60	30	60
<i>Alberta:—</i>														
Edmonton.....	28	48	28	48	28	48	28	48	28	48	35	44	35	44
Calgary.....	32½	48									35	48	35	48
<i>British Columbia:—</i>														
Vancouver.....							43½	44	43½	44	43½	44	43½	44

## VI.—METAL.

## BLACKSMITHS.—Continued.

LOCALITY.	Unit.		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>			\$		\$		\$		\$		\$		\$		\$	
Dartmouth... Week.. Wk.	10.00	54	12.00	54	12.00	54	14.00	54	14.00	54	14.00	54	14.00	54	14.00	54
New Glasgow Hour.. Wk.	.25	57½	.25	57½	.25	57½	.25	57½	.25	57½	.25	57½	.27½	57½	.27½	57½
<i>New Brunswick:—</i>																
Fredericton... Hour.. Wk.	.25	54	.26	54	.26½	54	.28	54	.30	54	.30	54	.30	54	.30	54
Sussex..... Hour.. Wk.	.16	60	.16	60	.16	60	.16	60	.16	60	.16	60	.18½	60	.20	60
<i>Quebec:—</i>																
Cowansville... Week.. Wk.	9.00	60	9.00	60	9.00	60	10.50	60	10.50	10	12.00	60	12.00	60	12.00	60
Montreal... Hour.. Wk.	.22½	55	.24	55	.24	55	.25	55	.25	55	.25	55	.25	55	.25	55
St. Hyacinthe Week.. Wk.	10.00	60	10.00	60	12.00	60	12.00	60	12.00	60	12.00	60	12.00	60	12.00	60
<i>Ontario:—</i>																
Brautford... Hour.. Wk.	.20	60	.20	60	.20	60	.22	60	.23	60	.23	55	.23	55	.23	55
Dundas... Hour.. Wk.	23.9	55	24.5	55	25.5	55	25.7	55	.25	55	26.3	55	27.3	55	27.3	55
Galt... Hour.. Wk.	20-27	55	20-27	55	20-27	55	20-28	55	20-29	55	20-29	55	20-30	55	20-30	55
Hamilton... Hour.. Wk.	.25	55	.25	55	.26	55	.26	55	.26	55	.27½	55	.30	55	.30	55
London... Hour.. Wk.	.23½	55	.24	55	.24½	55	.25	55	.25	55	.25	55	.25	55	.25	55
Ottawa... Day.. Dy	2.50	10	2.50	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	10	3.00	9
Stratford... Hour.. Wk.	.20	59	.22	59	.22	59	.22½	59	.22½	59	.22½	59	.22½	59	.22½	59
<i>Manitoba:—</i>																
Winnipeg... Hour.. Wk.	.32½	60	.32½	60	.35	60	.35	60	.37½	55	.37½	55	.40	55	.40	55
<i>Saskatchewan:—</i>																
Regina... Hour.. Wk.			.32½	60	.32½	60	.35	60	.35	60	.40	60	.40	60	.40	60
<i>British Columbia</i>																
Nelson... Hour.. Wk.	.45	54	.45	54	.45	54	.45	54	.45	54	.45	54	.45	54	.45	54
Vancouver... Week.. Wk.	20.00	50	20.00	50	20.00	50	20.80	50	20.80	50	20.80	50	20.80	50	20.80	50
Victoria... Day.. Dy	3.50	54	3.50	54	3.50	54	3.75	54	3.75	54	3.75	54	3.75	54	3.75	54

## IRON MOULDERS.

LOCALITY.	Unit		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:—</i>																
Amherst.....	Day..	Wk.	2.50	60	2.50	60	2.50	60	2.50	60	2.75	60	2.75	60	2.75	60
Halifax.....	Day..	Wk.	1.75	54	2.00	54	2.00	54	2.00	54	2.00	54	2.00	54	2.00	54
			2.00		2.25		2.25		2.25		2.25		2.25		2.25	
New Glasgow	Hour..	Wk.	19	57½	20	57½	20	57½	22½	57½	22½	57½	20	57½	20	57½
			2.00		2.25		2.25		2.25		2.25		2.25		2.25	
<i>New Brunswick:</i>																
Fredericton...	Hour..	Wk.	20	60	20	60	20	60	20	60	20	60	20	60	22½	54
St. John.....	Week..	Wk.	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54
Sussex.....	Hour..	Wk.	*		*		15	60	15	60	15	60	16½	60	18	60
<i>Quebec:</i>																
Cowansville...	Week..	Wk.	9.00	60	9.00	60	9.00	60	9.00	60	10.50	60	10.50	60	12.00	60
Montreal.....	Hour..	Wk.	20	60	22½	60	24	60	24	60	25½	60	25½	60	25½	60
St. Hyacinthe	Week..	Wk.			12.00	60	12.00	60	12.00	60	12.00	60	12.00	60	12.00	60
<i>Ontario:—</i>																
Brantford....	Hour..	Wk.	21	60	21	60	24	60	23	60	23½	60	26	60	25	60
Carleton Pl...	Hour..	Wk.	22½	60	22½	60	22½	60	22½	60	26½	60	26½	60	26½	60
Dundas.....	Hour..	Wk.	22½	55	23	55	25½	55	26	55	26	55	26	55	26.3	55
Galt.....	Hour..	Wk.	18½	55	19	55	19½	55	21	55	21½	55	21½	55	23	55
			25½		25½		27½		27½		29		29		30	
Ottawa.....	Day..	Dy			2.00	10	2.00	10	2.00	10	2.00	10	2.25	10	2.25	10
Guelph.....	Hour..	Wk.			22½	59	22½	59	25	59	25	59	25	59	25	54
London.....	Hour..	Wk.	19	58	19	58	20	58	21	58	21½	55	22	55	23	55
Stratford....	Hour..	Wk.	20	60	20	60	20	60	20	60	20	60	22½	59	22½	59
<i>Manitoba:—</i>																
Winnipeg....	Hour..								30	60	30	60	30	60	30	60
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.			40	60	40	60	40	60	40	60	40	60	40	60
Grand Forks..	Day..	Wk.														
Vancouver....	Week..	Wk.					19.25	55	19.45	50	19.45	50	19.45	50	19.45	50

\*No records.

## COREMAKERS.

<i>Nova Scotia:—</i>																
Amherst.....	Day..	Wk.	1.50	60	1.50	60	1.50	60	1.50	60	1.50	60	1.75	60	1.75	60
Halifax.....	Day..	Wk.	1.50	54	1.50	54	1.50	54	1.50	54	1.50	54	1.50	54	1.50	54
New Glasgow	Hour..	Wk.	17½	57½	17½	57½	17½	57½	17½	57½	17½	57½	17½	57½	17½	57½
Yarmouth....	Day..						1.75		1.75		2.00		2.00		2.00	
<i>New Brunswick:</i>																
Fredericton...	Hour..	Wk.	10	60	10	60	10	60	10	60	10	60	12	60	13 8-9	54
<i>Quebec:—</i>																
Cowansville...	Day..	Wk.			3.00	60	3.00	60	3.00	60	3.00	60	3.00	60	3.00	60
Montreal.....	Hour..	Wk.	17½	60	17½	60	20	60	20	60	25	60	24	60	24	60
<i>Ontario:—</i>																
Brantford....	Hour..	Wk.	07	60	09	60	10	60	12	60	12	60	12	60	12	60
Carleton Pl...	Hour..	Wk.	20	60	20	60	20	60	22½	60	22½	60	22½	60	30	60
Dundas.....	Hour..	Wk.	15	55	15	55	16	55	17	55	17	55	15 5	55	15.7	55
Galt.....	Hour..	Wk.	12½	55	12½	55	14	55	15	55	14	55	14	55	15	55
			21½		21½		21½		22½		22½		22½		25	
Hamilton.....	Hour..	Wk.											27-30	55	27 32	55
Ottawa.....	Day..	Dy	1.50	10	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10	2.00	10
Toronto.....	Hour..	Wk.							21.50	55	21.75	55	21.75	55	22.25	55
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.							27	60	27½	60	27 ½	60	30	60
<i>Alberta:—</i>																
Lethbridge...	Hour..	Wk.									35	54	35	54	35	54
<i>British Columbia</i>																
Vancouver....	Week..	Wk.					19.25	55	19.45	50	19.45	50	19.45	50	19.45	50

## IRON MOULDERS.—Continued.

LOCALITY.	Unit		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:—</i>																
Amherst....	Day..	Wk.	2.75	60	2.75	60	2.75	60	3.00	60	3.00	60	3.25	60	3.25	60
Halifax....	Day..	Wk.	2.25	54	2.25	54	2.25	54	2.25	54	2.25	54	2.25	54	2.25	54
			2.35		2.35		2.35		2.50		2.50		2.75		3.00	
New Glasgow	Hour..	Wk.	20	57½	22	57½	22	57½	22½	57½	22½	57½	25	57½	27½	57½
<i>New Brunswick:—</i>																
Fredericton..	Hour..	Wk.	.22½	54	.22½	54	.22½	54	.22½	54	.22½	54	.22½	54	.22½	54
St. John....	Week..	Wk.	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54	11-18	54
Sussex.....	Hour..	Wk.	.18	60	.18	60	.18	60	.20	60	.20	60	.20	58½	.23	58½
<i>Quebec:—</i>																
Cowansville..	Week..	Wk.	12.00	60	12.00	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60
Montreal....	Hour..	Wk.	.25½	60	.27½	60	.27½	60	.27½	60	.30	60	.30	60	.30	60
St. Hyacinthe	Week..	Wk.	13.50	60	13.50	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60
<i>Ontario:—</i>																
Brantford....	Hour..	Wk.	.25½	60	.27	60	.27	60	.28	60	.29	60	.30	50	.30	50
Carleton Pl..	Hour..	Wk.	.26½	60	.27½	60	.30	60	.30	60	.32½	60	.32½	60	.32½	60
Dundas.....	Hour..	Wk.	.28.3	55	.28.2	55	.28.5	55	.29	55	.28.4	55	.30.9	55	.32.6	55
Galt.....	Hour..	Wk.	.25	55	.24	55	.25	55	.24	55	.27	55	.28	55	.28	55
			.30		.30		.30		.30		.31½		.34		.34	
Ottawa.....	Day..	Dy.	2.25	10	2.50	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	10
Guelph.....	Hour..	Wk.	.25	54	.25	54	.25	54	.27½	54	.27½	54	.30	54	.30	54
London.....	Hour..	Wk.	.23½	55	.24½	55	.25	55	.27	55	.27	55	.28½	55	.29	56
Stratford....	Hour..	Wk.	.22½	59	.22½	59	.22½	59	.22½	59	.25	59	.25	59	.25	59
<i>Manitoba:—</i>																
Winnipeg....	Hour..		.30	60	.32½	60	.32½	60	.35	60	.35	55	.35	55	.37½	55
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.45	54	.45	54	.45	54	.45	54	.50	54	.50	54	.50	54
Grand Forks.	Day..	Wk.	3.50	54	3.75	54	3.75	54	4.00	54	4.00	54	4.00	54	4.00	54
Vancouver...	Week..	Wk.	20.80	50	20.80	50	22.20	50	22.20	50	22.20	50	22.20	50	22.20	50

## COREMAKERS. Continued.

<i>Nova Scotia:—</i>																
Amherst....	Day..	Wk.	1.75	60	1.75	60	2.00	60	2.00	60	2.25	60	2.25	60	2.50	60
Halifax....	Day..	Wk.	2.00	54	2.25	51	2.25	54	2.25	54	2.35	54	2.35	54	2.35	54
New Glasgow	Hour..	Wk.	.17½	57½	.17½	57½	.17½	57½	.17½	57½	.17½	57½	.17½	57½	.20	57½
Yarmouth....	Day..		2.00		2.00		2.25		2.25		2.25		2.25		2.25	
<i>New Brunswick:—</i>																
Fredericton..	Hour..	Wk.	13 8-9	54	13 8 9	54	13 8 9	54	13 8-9	54	13 8-9	54	13 8-9	54	.15	54
<i>Quebec:—</i>																
Cowansville..	Day..	Wk.	3.00	60	3.00	60	3.00	60	3.00	60	3.00	60	3.00	60	3.00	60
Montreal....	Hour..	Wk.	.24	60	.24	60	.24	60	.24	60	.27½	60	.30	60	.30	60
<i>Ontario:—</i>																
Brantford....	Hour..	Wk.	.14	60	.12	60	.15	60	.15	60	.16	60	.17	50	.17	50
Carleton Pl..	Hour..	Wk.	.30	60	.30	60	.30	60	.32½	60	.32½	60	.32½	60	.32½	60
Dundas.....	Hour..	Wk.	.18.3	55	.22.2	55	.22.1	55	.21.7	55	.20.6	55	.23.3	55	.26.3	55
Galt.....	Hour..	Wk.	.15	55	.15	55	.15	55	.15	55	.15	55	.16	55	.16	55
			.25		.25		.25		.25		.25		.26		.26	
Hamilton....	Hour..	Wk.	27 32	55	27-35	55	28-35	55	28-37	55	28-38	55	30-40	55	30-40	55
Ottawa.....	Day..	Dy.	2.00	10	2.40	10	2.40	10	2.40	10	2.40	10	2.40	9	2.50	9
Toronto.....	Hour..	Wk.	21.92	55	22.45	55	20.82	55	21.79	55	24.31	55	23.69	55	23.96	55
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.	.30	60	.30	60	.32½	60	.32½	60	.32 ½	55	.35	55	.35	55
<i>Alberta:—</i>																
Lethbridge...	Hour..	Wk.	.35	54	.35	54	.35	54	.35	54	.35	54	.35	54	.35	54
<i>British Columbia</i>																
Vancouver...	Week..	Wk.	20.80	50	20.80	50	22.20	50	22.20	50	22.20	50	22.20	50	22.20	50

## BOILERMAKERS.

LOCALITY.	Unit.		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:—</i>																
Dartmouth...	Week.	Wk.	10-12	54	10-12	54	10-12	54	13.50	54	15.00	54	15.00	54	15.00	54
New Glasgow	Hour..	Wk.	.17½	57¾	.17½	57¾	.17½	57¾	.17½	57¾	.18½	57¾	.18½	57¾	.18½	57¾
Yarmouth...	Day..	Wk.							1.75		1.75		2.00		2.00	
<i>Quebec:—</i>																
Montreal....	Hour..	Wk.													.24	55
St. Hyacinthe	Week..	Wk.	10.50	60	10.50	60	10.50	60	10.50	60	10.50	60	12.00	54	12.00	54
<i>Ontario:—</i>																
Brantford...	Day..	Wk.	1.48	55	1.52	55	1.60	55	1.70	55	1.74	55	1.75	55	1.85	55
Galt.....	Hour..	Wk.	17-20	55	18-22½	55	21-25	55	.22	55	.22½	55	23-	55	22½-	55
									.27½		.27½		.27½		.27½	
Guelph.....	Hour..	Wk.													.16	59
London.....	Hour..	Wk.	.20	58	.20	58	.21	58	.22	58	.22	55	.23	55	.23	55
Toronto.....	Hour..	Wk.							23.75	55	24.25	55	25.00	55	26.00	55
<i>British Columbia</i>																
Vancouver...	Week..	Wk.	19.25	55	19.25	55	19.25	55	18.00	50	18.00	55	19.45	50	19.45	50
Victoria.....	Day..	Wk.											3.50	54	3.50	54

## MACHINISTS.

<i>Nova Scotia:—</i>																
Dartmouth...	Week..	Wk.													15	54
New Glasgow	Hour..	Wk.	.22½	57	.22½	57¾	.22½	57¾	.22½	57¾	.22½	57¾	.22½	57¾	22.00	57¾
<i>New Brunswick:</i>																
Sussex.....	Hour..	Wk.					.16	60	.16	60	.16	60	.20	60	.20	60
<i>Quebec:—</i>																
Cowansville..	Week..	Wk.			9.00	60	9.00	60	9.00	60	9.00	60	10.50	60	10.50	60
Montreal....	Hour..	Wk.													.22½	55
St. Hyacinthe	Week..	Wk.			10.50	60	10.50	60	12.00	60	12.00	60	12.00	60	12.00	60
<i>Ontario:—</i>																
Dundas.....	Hour..	Wk.	16.5	55	17.2	55	18.5	55	20.7	55	21.4	55	21.5	55	23.1	55
Galt.....	Hour..	Wk.	16-25	55	16-25	55	16-25	55	17½-	55	17½-	55	17½-	55	19 -	55
									.27½		.29		.29		.31½	
Guelph.....	Hour..	Wk.			.25	59	.25	59	.25	59	.25	59	.30	59	.30	59
Hamilton....	Hour..	Wk.	.22½	55	.22½	55	.22½	55	.22½	55	.25	55	.25	55	.25	55
London.....	Hour..	Wk.	.20	58	.20	58	.21	58	.21	58	.22	55	.22	55	.23	55
Ottawa.....	Day..	Dy			2.00	10	2.00	10	2.00	10	2.25	10	2.25	10	2.25	10
Stratford....	Hour..	Wk.			.20	60	.20	60	.21	60	.22½	60	.22½	59	.23	59
<i>Manitoba: -</i>																
Brandon....	Hour..	Wk.	.25	60	.25	60	.25	60	.25	60	.25	60	.25	60	.25	60
Winnipeg....	Hour..	Wk.							.27½	60	.30	60	.30	60	.30	60
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.35	60	.35	60	.35	60	.35	60	.35	60	.35	60	.35	60
Vancouver...	Week..	Wk.	16.50	55	16.50	55	17.80	55	18.00	50	18.00	50	18.00	50	18.00	50
Victoria.....	Day..	Wk.											3.25	54	3.25	54

## BOILERMAKERS.—Continued.

LOCALITY.	Unit		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:—</i>																
Dartmouth...	Week.	Wk.	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54
New Glasgow	Hour.	Wk.	.20	57½	.20	57½	.20	57½	.20	57½	.21½	57½	.22½	57½	.24	57½
Yarmouth...	Day..	Wk.	2.00		2.00		2.25		2.25		2.25		2.25		2.25	
<i>Quebec:—</i>																
Montreal....	Hour..	Wk.	.24	55	.26	55	.28	55	.28	55	.30	55	.30	55	.30	55
St. Hyacinthe	Week..	Wk.	12.00	54	13.50	54	13.50	54	15.00	54	15.00	54	15.00	54	15.00	54
<i>Ontario:—</i>																
Brantford...	Day..	Wk.	1.98	55	2.32	55	2.03	55	2.20	55	2.27	55	2.25	55	2.43	55
Galt.....	Hour..	Wk.	.22½	55	.26	55	.26	55	.22½	55	.26½	55	.25	55	.25	55
			.27½		.27½		.27½		.28½		.30		.32½		.35	
Guelph*....	Hour..	Wk.	.18	59	.20	59	.22½	59	.25	59	.27½	59	.27½	59	.27½	59
London.....	Hour..	Wk.	.23½	55	.24½	55	.24½	55	.26	55	.27	55	.28	55	.29	55
Toronto.....	Hour..	Wk.	28.00	55	25.86	55	27.89	55	27.98	55	30.76	55	30.00	55	29.07	55
<i>British Columbia</i>																
Vancouver...	Week..	Wk.	20.80	50	20.80	50	20.80	50	20.80	50	20.80	50	20.80	50	20.80	50
Victoria....	Day..	Wk.	3.50	54	3.50	54	3.50	54	3.75	54	3.75	54	3.75	54	3.75	54

## MACHINISTS.—Continued.

<i>Nova Scotia:—</i>																
Dartmouth...	Week..	Wk.	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	18.00	54	18.00	54
New Glasgow	Hour..	Wk.	.23	57½	.25	57½	.25	57½	.25	57½	.25	57½	.27½	57½	.27½	57½
<i>New Brunswick:—</i>																
Sussex.....	Hour..	Wk.	.20	60	.20	60	.20	60	.20	60	.22	60	.23	60	.23	60
<i>Quebec:—</i>																
Cowansville...	Week..	Wk.	10.50	60	10.50	60	12.00	60	12.00	60	12.00	60	13.50	60	13.50	60
Montreal....	Hour..	Wk.	.24	55	.25	55	.25	55	.28	55	.30	55	.30	55	.30	55
St. Hyacinthe	Week..	Wk.	12.00	60	13.50	60	13.50	60	15.00	60	15.00	60	15.00	60	15.00	60
<i>Ontario:—</i>																
Dundas.....	Hour..	Wk.	.23	7	.22	8	.23	55	.24	1	.25	2	.24	8	.26	1
Galt.....	Hour..	Wk.	.19	55	.20	55	.20	55	.21	55	.22½	55	.23½	55	.24	55
			.31½		.31½		.31½		.33		.33		.35		.35	
Guelph.....	Hour..	Wk.	.30	59	.30	59	.30	59	.35	59	.35	59	.35	59	.35	59
Hamilton....	Hour..	Wk.	.25	55	.25	55	.26	55	.26	55	.27½	55	.27½	55	.29	55
London.....	Hour..	Wk.	.23½	55	.24½	55	.25	55	.25	55	.26	55	.28	55	.30	55
Ottawa.....	Day..	Dy.	2.50	10	2.50	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	10
Stratford....	Hour..	Wk.	.23	59	.23	59	.23	59	.25	59	.25	59	.25	59	.25	59
<i>Manitoba:—</i>																
Brandon....	Hour..	Wk.	.25	60	.30	60	.30	60	.30	60	.32	60	.34	60	.34	60
Winnipeg....	Hour..	Wk.	.32½	60	.32½	60	.35	60	.35	60	.37½	55	.37½	55	.40	55
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.45	54	.45	54	.45	54	.45	4	.45	54	.45	51	.54	54
Vancouver...	Week..	Wk.	20.00	50	20.00	50	20.00	50	20.00	50	20.00	50	20.00	50	20.00	50
Victoria.....	Day..	Wk.	3.25	54	3.25	54	3.50	54	3.50	54	3.50	54	3.50	54	4.00	54



## BRASS MOULDERS.

LOCALITY.	Unit.		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>			\$		\$		\$		\$		\$		\$		\$	
Yarmouth....	Per Day...												2.00		2.00	
<i>Ontario:—</i>																
Belleville....	Hour..	Wk.	.17½	59	.17½	59	.17½	59	.20	59	.20	59	.20	59	.20	59
Brantford....	Hour..	Wk.					.22½	60	.22½	60	.23½	60	.25	60	.25	60
Hamilton....	Hour..	Wk.											30-40	55	30-40	55
Peterborough	Hour..	Wk.	.20	55	.20	55	.20	55	.22½	55	.22½	55	.22½	55	.22½	55
<i>British Columbia</i>																
Victoria.....	Day..	Wk.	3.00	60	3.00	60	3.00	60	3.00	54	3.00	54	3.00	54	3.00	54

## SHEET METAL WORKERS.

<i>Nova Scotia:—</i>																
Halifax.....	Day..	Wk.	1.50	54	1.50	54	1.60	54	1.75	54	1.75	54	1.75	54	1.75	54
<i>New Brunswick:</i>																
Fredericton..	Hour..	Wk.	13 8 9	60	13 8 9	60	13 8 9	60	13 8 9	60	13 8 9	60	15.00	60	15.00	54
Sackville....	Day..	Wk.							1.50	60	1.50	60	1.50	60	1.50	60
St. John.....	Week.	Wk.	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54
<i>Ontario:—</i>																
Galt.....	Hour..	Wk.	.14-	55	.14-	55	.14½	55	.16-	55	.16-	55	.17-	55	.18-	55
			.20		.21		21		.22½		.24		.25		.27	
London.....	Hour..	Wk.									.20	60	.20	60	.20	60
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.							.26	60	.27½	60	.27½	60	.30	60
<i>British Columbia</i>																
Vancouver...	Week.	Wk.	13.75	55	13.75	55	14.25	55	15.00	55	15.00	50	15.00	50	16.60	50

## BRASS MOULDERS.—Continued.

LOCALITY.	Unit.		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>	Per		\$		\$		\$		\$		\$		\$		\$	
Yarmouth...	Day...	....	2.00	....	2.25	....	2.25	....	2.25	....	2.25	....	2.25	....	2.25	....
<i>Ontario:—</i>																
Belleville...	Hour..	Wk.	.20	59	.20	59	.20	59	.22½	59	.22½	59	.22½	59	.22½	59
Brantford...	Hour..	Wk.	.25	60	.27	60	.25	60	.26½	60	.27½	60	.27½	50	.27½	50
Hamilton...	Hour..	Wk.	30-42	55	30-44	55	33 45	55	33 45	55	33 46	55	33 47	55	33 47	55
Peterborough	Hour..	Wk.	.22½	55	.22½	55	.22½	55	.25	55	.25	55	.26	55	.26	55
<i>British Columbia</i>																
Victoria.....	Day..	Wk.	3.00	54	3.00	54	3.00	54	3.00	54	3.00	54	4.00	50	4.00	50

## SHEET METAL WORKERS.—Continued.

<i>Nova Scotia:—</i>							**		**		**		**		**	
Halifax.....	Day..	Wk.	2.00	54	2.25	54	20-25	54	20-25	54	22-28	54	25-30	54	30-35	54
<i>New Brunswick:</i>																
Fredericton...	Hour..	Wk.	.15	54	.15	54	.15	54	.15	54	.15	54	16½	54	16½	54
Sackville...	Day..	Wk.	1.65	60	1.65	60	1 75	60	1.75	59	1.75	59	2.00	59	2.25	59
St. John.....	Week..	Wk.	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54	12-15	54
<i>Ontario:—</i>																
Galt.....	Hour..	Wk.	.18-	55	.18-	55	.18½	55	.19	55	.19-	55	.19-	55	.20-	55
			.27		.29		.29		31½		31½		.33		.33	
London.....	Hour..	Wk.	.21	60	.21	60	.21	60	.21½	60	.22½	60	.25	60	.26½	60
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.	.30	60	.30	60	.32½	60	.32½	60	.32½	55	.35	55	.37½	55
<i>British Columbia</i>																
Vancouver...	Week..	Wk.	16.60	50	16.60	50	16.60	50	16.60	50	16.60	50	16.60	50	16.60	50

\*\*Per Hour

## PATTERNMAKERS.

LOCALITY.	Unit.		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>			\$		\$		\$		\$		\$		\$		\$	
Amherst.....	Per Day..	Wk.	2.00	60	2.00	60	2.00	60	2.00	60	2.00	60	2.25	60	2.25	60
Dartmouth....	Week..	Wk.			12.00	54	12.00	54	13.50	54	15.00	54	15.00	54	15.00	54
Halifax.....	Day..	Wk.	2.00	54	2.25	54	2.00	54	2.00	54	2.00	54	2.00	54	2.00	54
							2.50		2.50		2.50		2.50		2.50	
New Glasgow	Hou..	Wk.	.20	57½	.21	57¾	.22½	57¾	.22½	57¾	.22	57¾	.22	57¾	.22	57¾
<i>New Brunswick:</i>																
Sackville....	Day..	Wk.	1.60	60	1.60	60	1.60	60	1.75	60	1.75	60	1.75	60	2.00	60
Fredericton..	Hour..	Wk.	.25	60	.25	60	.25	60	.25	60	.25	60	.25	60	27 7-9	54
<i>Quebec:—</i>																
Montreal....	Week..	Wk.														
St. Hyacinthe	Week..	Wk.			12.00	60	12.00	60	12.00	60	12.00	60	12.00	60	12.00	60
<i>Ontario:—</i>																
Bracebridge..	Day..	Wk.					2.00	60	2.00	60	2.25	60	2.25	60	2.40	60
Brantford....	Hour..	Wk.	.15	60	.15	60	.16	60	.16	60	.17	60	.17	60	.18	60
Carleton Pl..	Hour..	Wk.	.20	60	.20	60	.20	60	.20	60	.20	60	.20	60	.25	60
Dundas.....	Hour..	Wk.	.18	55	.18.3	55	.19	55	.21.9	55	.22.1	55	.21.3	55	.22.9	55
Galt.....	Hour..	Wk.	.16-	55	.16-	55	.17½	55	.18½	55	.18½	55	.21½	55	.24-	55
			.19½		.21		.23½		.23½		.23½		.26½		.29	
Hamilton....	Hour..	Wk.											27-30	55	28-30	55
Ottawa.....	Day..	Dy.	2.25	10	2.25	10	2.50	10	2.50	10	2.75	10	2.75	10	2.75	10
Toronto.....	Week..	Wk.							23.75	55	29.50	55	29.90	55	31.00	55
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.							.30	60	.30	60	.30	60	.30	60
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.			.40	60	.40	60	.40	60	.40	60	.40	60	.40	60
Vancouver...	Week..	Wk.	16.50	55	16.50	55	19.25	55	20.80	50	20.80	50	20.80	55	20.80	50
Victoria.....	Day..	Wk.	3.25	60	3.25	60	3.25	60	3.25	60	3.25	54	3.25	54	3.25	54

## MACHINEISTS.

<i>Nova Scotia:—</i>																
Dartmouth....	Week..	Wk.											15.00	54	15.00	54
<i>Quebec:—</i>																
St. Hyacinthe	Week..	Wk.			10.50	60	10.50	60	12.00	60	12.60	60	12.00	60	12.00	60
Montreal....	Hour..	Wk.													.22½	55
<i>Ontario:—</i>																
Stratford....	Hour..	Wk.			.20	60	.20	60	.21	60	22½	60	22½	59	.23	59
Guelph.....	Hour..	Wk.			.25	59	.25	59	.25	59	.25	59	.30	59	.30	59
Ottawa.....	Day..	Dy.			2.00	10	2.00	10	2.00	10	2.25	10	2.25	10	2.25	10
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.35	60	.35	60	.35	60	.35	60	.35	60	.35	60	.35	60
Victoria.....	Day..	Wk.											3.25	54	3.25	54

## PATTERNMAKERS.—Continued.

LOCALITY.	Unit.		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>Nova Scotia:—</i>			\$		\$		\$		\$		\$		\$		\$	
Amherst....	Per Day..	Wk.	2.25	60	2.25	60	2.25	60	2.50	60	2.50	60	3.00	60	3.00	60
Dartmouth...	Week..	Wk.	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54
Halifax.....	Day..	Wk.	2.00	54	2.00	54	*.30	54	*.30	54	*.30	54	*.30	54	*.30	51
			2.50		2.50		.36		.36		.36		.36		.45	
New Glasgow	Hour..	Wk.	.22	57½	.22	57½	.22	57½	.22	57½	.22½	57½	.22½	57½	.22½	57½
<i>New Brunswick:</i>																
Sackville....	Day..	Wk.	2.10	60	2.10	60	2.25	60	2.50	59	2.50	59	2.50	59	2.50	59
Fredericton..	Hour..	Wk.	27 7-9	54	27 7-9	54	.30	54	.30	54	.30	54	.30	54	.30	54
<i>Quebec:—</i>																
Montreal....	Week..	Wk.	16.50	55	17.87	55	19.25	55	19.25	55	20.62	55	22	55	22	55
St. Hyacinthe	Week..	Wk.	12.00	60	12.00	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60
<i>Ontario:—</i>																
Bracebridge..	Day..	Wk.	2.40	60	2.50	60	2.50	60	2.50	60	2.75	60	2.75	60	2.75	60
Brantford....	Hour..	Wk.	.19	60	.18½	60	.18½	60	.20	60	.23	60	.25	55	.25	55
Carleton Pl.	Hour..	Wk.	.25	60	.25	60	.25	60	.25	60	.25	60	.25	60	.30	60
Dundas.....	Hour..	Wk.	.25.8	55	.28.7	55	.28	55	.27.2	55	.26.2	55	.26.4	55	.29.8	55
Galt.....	Hour..	Wk.	.24—	55	.22½	55	.24—	55	.22½	55	.25—	55	.24—	55	.27½	55
			.29		.29		.29		.29		.29		.32½		.34	
Hamilton....	Hour..	Wk.	28-30	55	29-32	55	29 32	55	29 32	55	30-34	55	30-35	55	30-37	55
Ottawa.....	Day..	Dy	2.75	10	3.00	10	3.00	10	3.00	10	3.25	10	3.50	10	3.75	10
Toronto.....	Week..	Wk.	32.63	55	31.85	55	30.45	55	32.04	55	33.84	55	34.41	55	37.56	55
<i>Manitoba:—</i>																
Winnipeg....	Hour..	Wk.	.32½	60	.32½	60	.35	60	.35	60	.37½	55	.37½	55	.40	55
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.50	54	.50	54	.50	54	.50	54	.50	54	.50	54	.50	54
Vancouver....	Week..	Wk.	22.20	50	22.20	50	22.20	50	22.20	50	22.20	50	22.20	50	25.00	50
Victoria.....	Day..	Wk.	3.25	54	3.25	54	3.25	54	3.25	54	3.25	54	4.25	50	4.25	50

\*Per hour.

## MACHINISTS.—Continued.

<i>Nova Scotia:—</i>																
Dartmouth...	Week..	Wk.	15.00	54	15.00	54	15.00	54	15.00	54	15.00	54	18.00	54	18.00	54
<i>Quebec:—</i>																
St. Hyacinthe	Week..	Wk.	12.00	60	13.50	60	13.50	60	15.00	60	15.00	60	15.00	60	15.00	60
Montreal....	Hour..	Wk.	.24	55	.25	55	.25	55	.28	55	.30	55	.30	55	.30	55
<i>Ontario:—</i>																
Stratford....	Hour..	Wk.	.23	59	.23	59	.23	59	.25	59	.25	59	.25	59	.25	59
Guelph.....	Hour..	Wk.	.30	59	.30	59	.30	59	.35	59	.35	59	.35	59	.35	59
Ottawa.....	Day..	Dy	2.50	10	2.50	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	10
<i>British Columbia</i>																
Nelson.....	Hour..	Wk.	.45	54	.45	54	.45	54	.45	54	.45	54	.45	54	.45	54
Victoria.....	Day..	Wk.	3.25	54	3.25	54	3.60	54	3.50	54	3.50	54	.....	.....	.....	.....

## IRON MOULDERS.

[illegible]

LABOURERS.

<i>Nova Scotia:</i>													
Dartmouth . .	Hour..	Wk.	.12½	54	.	.	.	.	.	.	.	.	.14 54
<i>Quebec:</i>													
Cowansville..	Week..	Wk.	.	60	60	60	60	60	80	7.50	80	7.50	60 7.50 60
Thetford.....													
<i>Ontario:</i>													
Guelph .....	Hour..	Wk.	.	.12½	59	.12½	59	.15	59	.15	59	.15	59 .17½
<i>Saskatchewan:</i>													
Regina.....	Day ..	Wk.	.	.	.	.	.	.	.	.	.	.	.
<i>British Columbia</i>													
Nelson .....	Hour..	Wk.	.25	60	.30	60	.30	60	.30	60	.30	60	.30 60
Victoria.....	Day ..	Wk.	.	.	.	.	.	.	.	.	.	2.25	54 2.25 54

## VII.—WOODWORKING.

(1) **Planing Mills.**

### PLANER HANDS.

[illegible]



IRON MOULDERS.—*Continued.*

LOCALITY.	Unit.		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
Quebec:—			\$		\$		\$		\$		\$		\$		\$	
St. Hyacinthe	Per Week.	Wk.	13.50	60	13.50	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60
Ontario:—																
Stratford....	Hour..	Wk.	.22½	59	.22½	59	.22½	59	.22½	59	.25	59	.25	59	.25	59
Guelph.....	Hour..	Wk.	.25	54	.25	54	.25	54	.27½	54	.27½	54	.30	54	.30	54
Ottawa.....	Day..	Dy	2.25	10	2.50	10	2.75	10	2.75	10	3.00	10	3.00	10	3.00	10
British Columbia																
Nelson.....	Hour..	Wk.	.45	54	.45	54	.45	54	.45	54	.50	54	.50	54	.50	54
Grand Forks.	Day..	Wk.	3.50	54	3.75	54	3.75	54	4.00	54	4.00	54	4.00	54	4.00	54

LABOURERS.—*Continued.*

Nova Scotia:—																
Dartmouth..	Hour..	Wk.											.14	54		
Quebec:—																
Cowansville..	Week..	Wk.	8.00	60	8.00		9.00	60	9.00	60	10.00	60	10.50	60	10.50	60
Thetford....									1.75	60	1.75	60	1.75	60	1.75	60
Ontario:—																
Guelph.....	Hour..	Wk.	.15	59	.15	59	.17½	59	.17½	59	.17½	59	.17½	59	.17½	59
			.17½		.17½				.25		.25		.25		.25	
Saskatchewan:																
Regina.....	Day..	Wk.					2.50	60	2.50	60	2.75	60	3.00	60	3.00	60
British Columbia																
Nelson.....	Hour..	Wk.	.33½	54	.33½	54	.33½	54	.33½	54	.33½	54	.33½	54	.33½	54
Victoria.....	Day..	Wk.	2.25	54	2.25	54	2.25	54	2.25	54	2.50	54				

## VII.—WOODWORKING.

## (1) Planing Mills.

PLANER HANDS.—*Continued.*

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
New Brunswick:—		\$		\$		\$		\$		\$		\$		\$	
St. Stephen.....	Week..	10.00	60	10.50	60	10.50	60	10.50	60	12.00	60	12.00	60	12.00	60
Ontario:—															
Brockville.....	Day..	1.75	59	1.75	59	1.75	59	1.75	59	2.00	59	2.00	59	2.00	59
Collingwood....	Hour..	.22½	59	.22½	59	.23½	59	.23½	59	.24	59	.25	59	.26½	59
Marmora.....	Day..	2.00	59	2.00	59	2.00	59	2.00	59	2.00	59	2.25	59	2.40	59
British Columbia:—															
Victoria.....	Hour..	.30	59	.33½	59	.33½	59	.37½	59	.37½	59	.37½	59	.37½	59

## (2) Sash and Door Factories.

## DOOR MAKERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$	\$		\$		\$		\$		\$		\$		\$	
<i>Nova Scotia:—</i>															
Yarmouth.....	Week.	10.06	60	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60
<i>Quebec:—</i>															
Lachine.....	Week.	12.00	60	12.00	60	12.00	58	12.00	58	12.00	58	13.00	55	13.00	55
<i>Ontario:—</i>															
Bracebridge.....	Week.	11.10	60	11.10	60	11.10	60	11.10	60	11.10	60	11.10	60	12.00	60
<i>British Columbia:—</i>															
Victoria.....	Hour..	.30	59	.30	59	.30	59	.30	59	.30	59	.30	59	.30	59

## MOULDING MACHINE OPERATORS.

<i>Nova Scotia:—</i>															
Yarmouth.....	Week.	10.00	60	10.00	60	10.00	60	12.00	60	12.00	60	12.00	60	12.00	60
<i>Quebec:—</i>															
Lachine.....	Week.	14.00	60	14.09	60	14.90	58	14.00	58	14.99	58	15.00	55	15.00	55
<i>Ontario:—</i>															
Bracebridge.....	Week.	10.50	60	10.50	60	10.50	60	10.50	60	10.50	60	10.50	60	12.00	60
<i>British Columbia:—</i>															
Victoria.....	Hour..	.35	59	.35	59	.35	59	.35	59	.35	59	.35	59	.35	59

## GLAZIERS.

<i>Nova Scotia:—</i>															
Yarmouth.....	Week.	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60
<i>Quebec:—</i>															
Lachine.....	Week.	11.00	60	11.00	60	12.00	58	12.00	58	12.00	58	13.00	55	13.00	55
<i>British Columbia:—</i>															
Victoria.....	Hour..	.30	59	.30	59	.30	59	.30	59	.30	59	.30	59	.30	59

## (3) Furniture Factories.

## RIP SAWYER.

<i>Quebec:—</i>															
Cowansville.....	Day..	1.25	10	1.25	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10
<i>Ontario:—</i>															
Berlin.....	Day..	1.75	10	1.75	10	1.75	10	1.90	10	1.90	10	1.90	10	1.90	10
Southampton.....	Day..	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10
Stratford.....	Day..	1.40	10	1.40	10	1.40	10	1.50	10	1.60	10	1.70	10	1.80	10

## (2) Sash and Door Factories.

DOOR MAKERS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$	\$		\$		\$		\$		\$		\$		\$	
Nova Scotia:— Yarmouth.....	Week.	10.00	60	11.00	60	11.00	54	11.00	54	11.00	54	11.00	54	11.00	54
Quebec:— Lachine.....	Week.	13.00	55	14.00	55	14.00	55	14.00	55	15.00	55	15.00	55	15.00	55
Ontario:— Bracebridge.....	Week.	13.50	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60	15.00	60
British Columbia:— Victoria.....	Hour..	.30	59	.30	59	.30	59	.35	59	.35	59	.35	59	.35	59

MOULDING MACHINE OPERATORS.—Continued.

Nova Scotia:— Yarmouth.....	Week.	12.00	60	12.00	60	12.00	54	12.00	54	12.00	54	15.00	54	15.00	54
Quebec:— Lachine.....	Week.	15.00	55	16.00	55	16.00	55	16.00	55	16.50	55	16.50	55	16.50	55
Ontario:— Bracebridge.....	Week.	12.00	60	13.50	60	13.50	60	13.50	60	13.50	60	13.50	60	13.50	60
British Columbia:— Victoria.....	Hour..	.35	59	.35	59	.35	59	.35	59	.35	59	.40	59	.40	59

GLAZIERS.—Continued.

Nova Scotia:— Yarmouth.....	Week.	10.00	60	10.00	60	10.00	60	12.00	54	12.00	54	12.00	54	12.00	54
Quebec:— Lachine.....	Week.	13.00	55	14.00	55	14.00	55	14.00	55	15.00	55	15.00	55	15.00	55
British Columbia:— Victoria.....	Hour..	.35	59	.35	59	.35	59	.37½	59	.37½	59	.40	59	.40	59

## (3) Furniture Factories.

RIP SAWYER.—Continued.

Quebec:— Cowansville.....	Day..	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10
Ontario:— Berlin.....	Day..	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.10	10	2.25	10
Southampton.....	Day..	1.50	10	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10	2.00	10
Stratford.....	Day..	1.90	10	1.90	10	1.90	10	2.00	10	2.15	10	2.25	10	2.40	10

## STICKER HAND.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<b>Quebec:—</b>															
Cowansville.....	Day..	1.25	10	1.25	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10
<b>Ontario:—</b>															
Berlin.....	Day..	2.00	10	2.00	10	2.00	10	2.15	10	2.15	10	2.15	10	2.15	10
Southampton.....	Day..	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
Stratford.....	Day..	1.80	10	1.90	10	2.00	10	2.10	10	2.10	10	2.20	10	2.30	10

## CABINET MAKERS.

<b>Quebec:—</b>															
Cowansville.....	Day..	1.50	10	1.50	10	1.50	10	1.60	10	1.60	10	1.60	10	1.70	10
<b>Ontario:—</b>															
Berlin.....	Day..	2.00	10	2.00	10	2.00	10	2.15	10	2.15	10	2.15	10	2.15	10
Southampton.....	Day..	1.75	10	1.75	10	1.85	10	1.85	10	1.85	10	1.85	10	1.85	10
Stratford.....	Day..	1.60	10	1.70	10	1.80	10	2.00	10	2.25	10	2.25	10	2.35	10

## FINISHERS' HELPERS.

<b>Quebec:—</b>															
Cowansville.....	Day..	1.00	10	1.00	10	1.00	10	1.00	10	1.25	10	1.25	10	1.25	10
<b>Ontario:—</b>															
Berlin.....	Day..	1.00	10	1.00	10	1.00	10	1.10	10	1.10	10	1.10	10	1.10	10
Southampton.....	Day..	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10	1.25	10
Stratford.....	Day..	1.00	10	1.25	10	1.30	10	1.40	10	1.40	10	1.50	10	1.50	10

## (4) Carriage and Wagon Factories.

## FOREMEN.

<b>Quebec:—</b>															
Granby.....	Day..	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10
Montreal.....	Week..							14	60	15	60	15	60	15	60
<b>Ontario:—</b>															
Plattsville.....															
Mount Forest.....	Day..	2.00	10	2.00	10	2.25	10	2.50	10	2.50	10	2.50	10	2.50	10

## WOODWORKERS.

<b>Quebec:—</b>															
Granby.....	Day..	1.50	10	1.50	10	1.50	10	1.65	10	1.65	10	1.75	10	1.83	10
Montreal.....	Week..							12	60	12	60	12	60	13	60
<b>Ontario:—</b>															
Plattsville.....	Day..	1.50	10	1.50	10	1.60	10	1.60	10	1.65	10	1.65	10	1.70	10
Mount Forest.....	Day..	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10	1.75	10	1.75	10

## STICKER HAND.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Quebec:—															
Cowansville.....	Day..	1.75	10	1.75	10	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10
Ontario:—															
Berlin.....	Day..	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.50	10
Southampton.....	Day..	2.25	10	2.25	10	2.25	10	2.25	10	2.50	10	2.50	10	2.50	10
Stratford.....	Day..	2.40	10	2.40	10	2.40	10	2.50	10	2.60	10	2.75	10	3.00	10

## CABINET MAKERS.—Continued.

Quebec:—															
Cowansville.....	Day..	1.70	10	1.70	10	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10
Ontario:—															
Berlin.....	Day..	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.30	10	2.40	10
Southampton.....	Day..	2.00	10	2.00	10	2.00	10	2.00	10	2.25	10	2.25	10	2.40	10
Stratford.....	Day..	2.35	10	2.35	10	2.35	10	2.50	10	2.50	10	2.60	10	2.75	10

## FINISHERS' HELPERS.—Continued.

Quebec:—															
Cowansville.....	Day..	1.50	10	1.50	10	1.50	10	1.75	10	1.75	10	1.75	10	1.75	10
Ontario:—															
Berlin.....	Day..	1.15	10	1.15	10	1.15	10	1.15	10	1.15	10	1.25	10	1.50	10
Southampton.....	Day..	1.35	10	1.35	10	1.35	10	1.35	10	1.50	10	1.50	10	1.65	10
Stratford.....	Day..	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.60	10

## (4) Carriage and Wagon Factories.

## FOREMEN.—Continued.

Quebec:—															
Granby.....	Day..	2.25	10	2.25	10	2.25	10	2.43	10	2.43	10	2.50	10	2.50	10
Montreal.....	Week.	16.00	60	16.00	60	16.00	60	16.00	60	18.00	60	19.00	60	21.00	60
Ontario:—															
Plattsville.....															
Mount Forest.....	Day..	2.75	10	2.75	10	2.75	10	2.75	10	2.75	10	3.00	10	3.00	10

## WOODWORKERS.—Continued.

Quebec:—															
Granby.....	Day..	1.83	10	1.83	10	1.90	10	1.90	10	2.00	10	2.25	10	2.50	10
Montreal.....	Week.	14.00	60	14.00	60	14.00	60	14.00	60	14.00	60	15.00	60	16.00	60
Ontario:—															
Plattsville.....	Day..	1.75	10	1.85	10	1.85	10	2.00	10	2.00	10	2.00	10	2.00	10
Mount Forest.....	Day..	1.90	10	1.90	10	1.90	10	1.90	10	1.90	10	2.00	10	2.00	10



## BODY MAKERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
<i>Quebec:—</i>															
Granby.....	Day..	1.40	10	1.40	10	1.50	10	1.50	10	1.66	10	1.66	10	1.66	10
Montreal.....	Week..							12.00	60	12.00	60	13.00	60	13.00	60
<i>Ontario:—</i>															
Plattsville.....	Day..	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.60	10	1.65	10
Mount Forest....	Day..	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10	2.00	10	2.00	10

## BLACKSMITHS.

<i>Quebec:—</i>															
Granby.....	Day..	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
Montreal.....	Week..							12.00	60	12.00	60	13.00	60	13.00	60
<i>Ontario:—</i>															
Plattsville.....	Day..	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10	1.60	10	1.60	10
Mount Forest....	Day..	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10	2.00	10	2.00	10

## LABOURERS.

<i>Quebec:—</i>															
Montreal.....	Week..							9.00	60	9.00	60	9.00	60	9.00	60
<i>Ontario:—</i>															
Plattsville.....	Day..	1.25	10	1.25	10	1.25	10	1.30	10	1.30	10	1.30	10	1.35	10
Mount Forest....	Day..	1.00	10	1.00	10	1.25	10	1.25	10	1.50	10	1.50	10	1.50	10

## BODY MAKERS—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Quebec:—															
Granby.....	Day..	1.66	10	1.75	10	1.75	10	1.75	10	2.00	10	2.00	10	2.00	10
Montreal.....	Week.	14	60	14	60	14	60	14	60	15	60	16	60	17	60
Ontario:—															
Plattsville.....	Day..	1.75	10	1.80	10	1.85	10	1.85	10	2.00	10	2.00	10	2.00	10
Mount Forest....	Day..	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.50	10	2.50	10

## BLACKSMITHS.—Continued.

Quebec:—															
Granby.....	Day..	2.10		2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10
Montreal.....	Week.	14.00	50	14.00	60	14.00	60	15.00	60	16.00	60	16.00	60	19.00	60
Ontario:—															
Plattsville.....	Day..	1.60	10	1.65	10	1.65	10	1.70	10	1.75	10	1.75	10	1.75	10
Mount Forest....	Day..	2.25	10	2.25	10	2.25	10	2.25	10	2.25	10	2.50	10	2.50	10

## LABOURERS.—Continued.

Quebec:—															
Montreal.....	Week.	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60	10.00	60	11.00	60
Ontario:—															
Plattsville.....	Day..	1.35	10	1.40	10	1.40	10	1.40	10	1.50	10	1.50	10	1.50	10
Mount Forest....	Day..	1.60	10	1.60	10	1.60	10	1.60	10	1.60	10	1.75	10	1.75	10



## VIII.—PRINTING.

FLOORMEN.—*Continued.*

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week		Per week		Per week		Per week		Per week		Per week		Per week	
<i>Nova Scotia:—</i>	\$		\$		\$		\$		\$		\$		\$	
Halifax.....	11	48	11	48	11	48	11	48	14	48	14	48	16	48
Westville.....	8 11	52	8-11	52	8-12	52	9-12	52	9-12	52	9-12	52	9-12	52
<i>Prince Edward Island:—</i>														
Charlottetown.....	15	54	15	54	15	54	15	54	15	54	15	54	15	54
<i>New Brunswick:—</i>														
St. John.....	12-14	48	12-14	48	12-14	48	14-16	48	14-16	48	14-16	48	16	48
Fredericton.....	10	48	10	48	12	48	12	48	12	48	12	48	14	48
<i>Quebec:—</i>														
Quebec.....	12.00	48	12	48	12	48	13.50	48	13.50	48	15	48	15	48
Three Rivers.....	10	48	10	48	10	48	12	48	15	48	18	48	18	48
Montreal.....	14	48	14	48	15	48	15	48	16	48	20	48	20	48
<i>Ontario:—</i>														
Peterborough.....	11.50	48	11.50	48	12	48	13.50	48	14 00	48	14	48	15	48
Toronto.....	15	48	15	48	16	48	16	48	17	48	18.50	48	18.50	48
Hamilton.....	16	48	16	48	16	48	16 50	48	17	48	19	48	19.50	48
London.....	12	48	13	48	14	48	14	48	16	48	16	48	17	48
Chatham.....	9	54	9	54	10	54	10	48	10	48	12	48	15	48
<i>Manitoba:—</i>														
Winnipeg.....	20	48	20	48	20	48	22	48	24	48	25	48	26	48
<i>Saskatchewan:—</i>														
Regina.....	15	48	18	48	18	48	19	48	20	48	22	48	22	48
Prince Albert.....	16	54	18	54	18	54	18	54	19	54	20	54	20	48
<i>Alberta:—</i>														
Medicine Hat.....	18	54	18	54	19	48	19	48	19	48	20	48	21	48
Edmonton.....	18	48	18	48	18	48	19	48	20	48	21	48	23	48
<i>British Columbia:—</i>														
Nelson.....	24	45	24	45	24	45	27	45	27	45	28.50	45	30	45
Victoria.....	24	48	24	48	24	48	24	48	27	48	27	48	30	45



## LINOTYPE OPERATORS.—Continued.

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
<i>Nova Scotia:—</i>														
Halifax.....	16	48	16	48	18	48	18	48	18	48	18	48	18	48
Westville.....	a		a		a		a		a		a		a	
	10-16	52	11-17	52	11-17	52	12-18	52	12-18	52	12-18	52	12-18	52
<i>New Brunswick:—</i>														
St. John.....	b		b		b		b		b		b		b	
	15	48	15	48	15-18	48	15-18	48	15-18	48	15-18	48	18-20	48
<i>Quebec:—</i>														
Quebec.....	14	48	14	48	14	48	15.50	48	15.50	48	17.	48	17	48
Montreal.....	16.00	48	16.00	48	17.00	48	17.00	48	18.00	48	22.00	48	22.00	48
<i>Ontario:—</i>														
Toronto.....	17.20	48	17.20	48	18.35	48	18.35	48	19.50	48	19.50	48	19.50	48
Hamilton.....	14.25	48	14.25	48	16	48	16	48	16	48	20.50	48	21	48
London.....	15	48	15	48	16	48	16	48	17	48	17	48	18	48
Chatham.....	14	54	14	54	15	48	15	48	15	48	15	48	18	48
<i>Manitoba:—</i>														
Winnipeg.....	20	48	20	48	20	48	22	48	24	48	25	48	26	48
<i>Saskatchewan:—</i>														
Regina.....	20	48	23	48	24	48	24	48	25	48	25	48	25	48
Prince Albert.....	24	48	26	48	26	48	26	48	26	48	27	48	27	48
<i>Alberta:—</i>														
Medicine Hat.....	a		a											
	20	54	20	54	22	48	22	48	22	48	23	48	24	48
Edmonton.....	22	48	22	48	24	48	24	48	24	48	25	48	25	48
<i>British Columbia:—</i>														
Nelson.....	27	45	27	45	27	45	30	45	30	45	31.50	45	33	45
Victoria.....	24	48	24	48	24	48	27	48	27	48	27	48	30	45

(a) Monoline. (b) Piece work, 8-10c. per 1,000 ems.

## PRESSMEN.—FLAT (Job Offices.)—Continued.

<i>Nova Scotia:—</i>														
Halifax.....	12	48	12	48	13	48	14	48	14	48	14	48	16	48
Westville.....	9-13	52	9-13	52	9-14	52	10-14	52	10-14	52	10-14	52	10-15	52
<i>Prince Edward Island:—</i>														
Charlottetown.....	10	54	10	54	10	54	10	54	10	54	10	54	10	54
<i>Quebec:—</i>														
Quebec.....	11	48	11	48	12	48	12	48	12	48	12	48	13	48
Three Rivers.....	10	48	10	48	10	48	12	48	12	48	12	48	12	48
Montreal.....	11	54	11	54	11	48	12	48	15	48	15.00	48	16.00	48
<i>Ontario:—</i>														
Toronto.....	16.50	48	16.50	48	17.50	48	17.50	48	18.50	48	19	48	20	48
Hamilton.....	14	48	14	48	15	48	15.50	48	15.50	48	16	48	18	48
London.....	12	51	12	51	12	51	13	51	13	51	15	51	18	51
Chatham.....	8.50	54	9	54	9	54	11	48	11	48	12	48	12	48
<i>Manitoba:—</i>														
Winnipeg.....	16	52	18	52	18	48	18	48	18	48	18	48	18.50	48
<i>Saskatchewan:—</i>														
Regina.....	18	48	18	48	18	48	22	48	22	48	22	48	22	48
Prince Albert.....	16	54	18	54	18	54	18	54	18	54	20	54	20	48
<i>Alberta:—</i>														
Medicine Hat.....			16	54	19	48	20	48	22	48	23	48	25	48
<i>British Columbia:—</i>														
Nelson.....	24	48	24	48	24	48	25	48	25	48	25	48	25	48
Victoria.....	21	48	22.50	48	22.50	48	22.50	48	22.50	48	22.50	48	25	48



## PRESSMEN—WEB.

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
<i>New Brunswick:—</i>														
Fredericton.....	8	54	8	54	8	54	9	54	9	54	9	54	10	54
<i>Quebec:—</i>														
Quebec.....	11	54	12	54	12	54	12	54	13	54	13	48	14	48
Montreal.....	9	60	9	60	9	60	9	60	10	54	10	54	10	54
<i>Ontario:—</i>														
Toronto.....	12	48	12	48	12	48	14	48	14	48	16	48	16	48
Hamilton.....	14	48	14	48	14	48	14	48	14	48	14	48	14	48
London.....	14	54	14	54	14	54	14	54	14	54	16	48	16	48
Chatham.....	10	48	10	48	11	48	11	48	11	48	12	48	12	48
<i>Manitoba:—</i>														
Winnipeg.....					16	54	18	54	18	54	22	48	22	48
<i>Saskatchewan:—</i>														
Regina*.....	12	54	12	54	14	54	14	54	16	54	16	54	16	54
Prince Albert*.....	14	54	14	54	14	54	14	54	16	54	16	54	16	54
<i>Alberta:—</i>														
Medicine Hat*.....														
<i>British Columbia:—</i>														
Victoria.....											25	48	25	48

\*Cylinder pressmen.

## STEREOTYPERS.

<i>New Brunswick:—</i>														
Fredericton.....														
<i>Quebec:—</i>														
Quebec.....											13	48	13	48
Montreal.....	12	48	12	48	12	48	13	48	13	48	15	48	15	48
<i>Ontario:—</i>														
Toronto.....	15	54	16	54	16	54	16	54	17	54	17	54	17	54
Hamilton.....	11.50	54	11.50	54	11.50	54	12.50	54	12.50	54	12.50	54	14.50	54
London.....	9	54	9	54	9	54	9	54	9	54	13	48	13	48
<i>Manitoba:—</i>														
Winnipeg.....	19	52	19	52	19	52	19	52	19	52	19	52	20	52
<i>Saskatchewan:—</i>														
Regina.....											22	48	22	48
<i>British Columbia:—</i>														
Victoria.....											25	48	25	48

## PRESSMEN.—WEB. —Continued.

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
<i>New Brunswick:—</i>	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
Fredericton.....	10	48	10	48	10	48	12	48	12	48	12	48	15	48
<i>Quebec:—</i>														
Quebec.....	15	48	15	48	16	48	16	48	16	48	16	48	17	48
Montreal.....	10	54	12	54	13	48	14	48	15	48	16.00	48	17.00	48
<i>Ontario:—</i>														
Toronto.....	16.00	48	18.00	48	18.00	48	18.00	48	18.00	48	20.00	48	20.00	48
Hamilton.....	15	48	15	48	15	48	15	48	15	48	18	48	18	48
London.....	16	48	16	48	16	48	18	48	18	48	18	48	18	48
Chatham.....	12	48	13	48	13	48	14	48	14	48	14	48	15	48
<i>Manitoba:—</i>														
Winnipeg.....	22	48	22	48	22	48	22	48	22	48	22	48	22	48
<i>Saskatchewan:—</i>														
*Regina.....	18	48	18	48	18	48	20	48	22	48	25	48	25	48
*Prince Albert.....	16	54	18	54	18	54	18	54	18	54	20	54	20	48
<i>Alberta:—</i>														
*Medicine Hat.....			16	54	19	48	20	48	22	48	23	48	25	48
<i>British Columbia:—</i>														
Victoria.....	25	48	25	48	25	48	25	48	25	48	25	48	27.50	48

\*Cylinder pressmen.

## STEREOTYPERS.—Continued.

<i>New Brunswick:—</i>														
Fredericton.....			12	48	12	48	12	48	12	48	12	48	12	48
<i>Quebec:—</i>														
Quebec.....	14	48	14	48	15	48	15	48	15	48	15	48	16	48
Montreal.....	17	48	17	48	18	48	18	48	19	48	19.00	48	20.00	48
<i>Ontario:—</i>														
Toronto.....	18	48	18	48	18.00	20	15.00	48	18.00	48	20.00	48	20.00	48
Hamilton.....	16	48	16	48	16	48	16.50	48	17	48	18.50	48	19	48
London.....	14	48	14	48	15	48	15	48	15	48	17-19	48	17-19	48
<i>Manitoba:—</i>														
Winnipeg.....	20	48	20	48	20	48	20	48	22	48	25	48	25	48
<i>Saskatchewan:—</i>														
Regina.....	22	48	22	48	22	48	22	48	24	48	24	48	24	48
<i>British Columbia:—</i>														
Victoria.....	25	48	25	48	27	45	27	45	27	45	27	45	27.00	45

## BOOKBINDERS.

LOCALITY.	1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
<i>Nova Scotia:—</i>														
Halifax.....	10.00	54	10	54	10	54	10	54	12	54	12	54	12	54
<i>Prince Edward Island:—</i>														
Charlottetown.....	8 14	54	8 14	54	8-14	54	8-14	54	8-14	54	8-14	54	8-14	54
<i>New Brunswick:—</i>														
Fredericton.....	14	54	14	54	14	54	15	54	15	54	16	54	16	54
<i>Quebec:—</i>														
Quebec.....	11-13	54	11 13	54	11 13	54	12-14	54	12-14	54	12-14	54	12-14	54
Three Rivers.....	8	48	9	48	9	48	9	48	10	48	10	48	10	48
Montreal.....	11	58	11	58	11	58	12	52	12	52	12	52	13	52
<i>Ontario:—</i>														
Peterborough.....	10	60	10	60	12	48	12	48	12	48	12	48	12	48
Toronto.....	11.75	54	12	54	13	54	13.25	54	13.50	54	14	54	14.50	54
Hamilton.....	15	55	15	55	15	55	15	55	15	55	15	55	15	55
London.....	10	55	10	55	10	55	10	55	10	55	12	55	12	55
Chatham.....	10-15	54	10-15	54	10-15	54	10-15	54	10-15	54	11-15	54	11-15	54
<i>Manitoba:—</i>														
Winnipeg.....	18	54	18	54	18	54	18	54	18	54	18	54	18	54
<i>Saskatchewan:—</i>														
Regina.....											20	48	20	48
<i>Alberta:—</i>														
Edmonton.....													15	52
<i>British Columbia:—</i>														
Victoria.....	18	54	18	54	18	54	21	54	21	54	21	54	21	54

## BINDERY GIRLS.

<i>Nova Scotia:—</i>														
Halifax.....	5	54	5	54	5	54	5	54	5	54	5-7	54	5-7	54
<i>Prince Edward Island:—</i>														
Charlottetown.....	2-5	54	2-5	54	2-5	54	2-5	54	2-5	54	2-5	54	2-5	54
<i>New Brunswick:—</i>														
Fredericton.....	4	54	4	54	4	54	4	54	4	54	4.50	54	4.50	54
<i>Quebec:—</i>														
Quebec.....	3.50-5	54	3.50-5	54	3.50-5	54	4-6	54	4-6	54	4-6	54	4-6	54
Three Rivers.....	3	48	3.50	48	3.50	48	3.50	48	4	48	4	48	4	48
Montreal.....	3	58	3	58	3	58	3-5	58	3-5	58	3-5	58	3-5	58
<i>Ontario:—</i>														
Peterborough.....	4	60	4	60	4	48	4	48	5	48	5	48	5	48
Toronto.....									5	54	5	54	5	54
Hamilton.....	4	55	4	55	4	55	4	55	4	55	4	55	5.50	55
London.....	3-5	56	3-5	56	3-5	56	3-5	56	4-6	52	4-6	52	4-6	52
<i>Manitoba:—</i>														
Winnipeg.....	5	54	5	54	7	54	7	54	7	54	7	54	7	54
<i>Saskatchewan:—</i>														
Regina.....											6-10	48	6-10	48
<i>Alberta:—</i>														
Edmonton.....													4	55
<i>British Columbia:—</i>														
Victoria.....	6	54	6	54	6	54	7	54	7	54	7	54	7	54

## BOOKBINDERS.—Continued.

LOCALITY.	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
<i>Nova Scotia</i> :—														
Halifax.....	12	54	13	54	13	54	14	54	14	54	15	54	15	54
<i>Prince Edward Island</i> :—														
Charlottetown.....	8-14	54	8-14	54	8-14	54	8-14	54	10-16	48	10-16	48	10-16	48
<i>New Brunswick</i> :—														
Fredericton.....	17	54	17	54	17	54	18	54	18	54	18	54	18	54
<i>Quebec</i> :—														
Quebec.....	12-14	54	12-15	54	12-15	54	12-15	54	12-15	54	16	52½	17	52½
Three Rivers.....	10	48	12	48	12	48	13.50	48	13.50	48	15	48	15	48
													b	
Montreal.....	13.50	52	13.50	48	13.50	48	14.50	48	15	48	18	48	18	48
<i>Ontario</i> :—														
Peterborough.....	12	48	14	48	14	48	14	48	16	48	16	48	16	48
Toronto.....	15	48	15	48	16	48	16	48	17	48	17.50	48	18	48
Hamilton.....	15	48	15	48	15	48	16	48	16.50	48	18	48	18	48
London.....	13	55	13	55	14	53½	14	53½	14	53½	15	53½	15	53½
Chatham.....	11-15	54	12-16	48	12-16	48	12-16	48	12-16	48	12 16	48	12-16	48
<i>Manitoba</i> :—														
Winnipeg.....	21	54	21	48	21	48	21	48	21	48	21	48	21	48
<i>Saskatchewan</i> :—														
Regina.....	20	48	20	48	20	48	22	48	22	48	24	48	24	48
<i>Alberta</i> :—														
Edmonton.....	18	48	18	48	18	48	20	48	20	48	24	48	25	48
<i>British Columbia</i> :—														
Victoria.....	21	48	21	48	21	48	21	48	22	48	24	48	24	48

## BINDERY GIRLS.—Continued.

<i>Nova Scotia</i> :—														
Halifax.....	5-7	54	5-7	54	5-8	54	5-8	54	5-8	54	5-8	54	5-8	54
<i>Prince Edward Island</i> :—														
Charlottetown.....	2-5	54	2-5	54	2-5	54	2-5	54	2.50 6.50	54	2.50 6.50	54	2.50 6.50	54
<i>New Brunswick</i> :—														
Fredericton.....	4.50	54	4.50	54	4.50	54	5	54	5	54	5	54	5	54
<i>Quebec</i> :—														
Quebec.....	4-6	54	4-7	54	4-7	54	4-7	54	4-7	54	5.50	52½	5.50	52½
Three Rivers.....	4	48	4.50	48	4.50	48	4.50	48	4.50	48	5	48	5	48
Montreal.....	3-5	48	3-5	48	3-5	48	3-5	48	5-7	48	5-8	48	5-8	48
<i>Ontario</i> :—														
Peterborough.....	5	48	5	48	5	48	5	48	5	48	5	48	5	48
Toronto.....	5.50	48	5.50	48	6	48	6	48	6.50	48	6.50	48	6.50	48
Hamilton.....	5.50	55	5.50	55	5.50	48	5.50	48	5.50	48	5.50	48	5.50	48
London.....	4-6	52	5-7	52	5-7	52	5-7	52	5-7	52	7-8	52	7 8	52
<i>Manitoba</i> :—														
Winnipeg.....	7	54	8	48	8	48	8	48	9	48	9	48	9	48
<i>Saskatchewan</i> :—														
Regina.....	6-10	48	6-10	48	6-10	48	6-10	48	6-12	48	12	48	12	48
<i>Alberta</i> :—														
Edmonton.....	4.50	48	5	48	5	48	5	48	5	48	9	48	10	48
<i>British Columbia</i> :—														
Victoria.....	7	48	9	48	9	48	9	48	11	48	11	48	11	48

## IX.—CLOTHING.

## (1) Tailors.

## (a) COATMAKERS.

LOCALITY.	1900			1901			1902			1903			1904			1905			1906		
	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week
	Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week	
	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
<i>Nova Scotia:—</i>																					
Halifax .....	3.50	10-12	54	3.50	10-12	54	3.50	10-12	54	3.50	12-15	54	3.50	12-15	54	3.50	12-15	54	4.00	12-15	54
Westville .....	3.00	.....	60	3.00	.....	60	3.00	.....	60	4.00	.....	60	4.00	.....	60	4.00	.....	60	4.00	.....	60
	4.50			4.50			4.50			6.00			6.00			6.00			6.00		
<i>Prince Edward Island:—</i>																					
Charlottetown .....	3.75	12	60	3.75	12	60	3.75	12	60	3.75	12	60	3.75	12	60	3.75	12	60	3.75	12	60
<i>New Brunswick:—</i>																					
St. John .....	3.75	.....		4.00	.....		4.00	.....		4.00	.....		4.00	.....		4.00	.....		4.00	.....	
	4.00	.....		4.50	.....		4.50	.....		4.50	.....		4.50	.....		4.50	.....		4.50	.....	
Fredericton .....	3.00	9	54	3.00	10	54	3.00	10	54	3.00	10	54	3.00	10	54	3.00	10	54	3.00	10	54
	6.00			6.00			6.00			6.00			6.00			6.00			6.00		
<i>Quebec:—</i>																					
Quebec .....	1.20	.....	54	1.20	.....	54	1.20	.....	54	1.20	.....	54	1.40	.....	54	1.40	.....	54	1.40	.....	54
Three Rivers .....	13.50	55		13.50	55		13.50	55		13.50	55		13.50	55		15.00	55		15.00	55	
Montreal .....	4.75	.....	60	4.75	.....	60	4.75	.....	54	4.75	.....	54	5.00	.....	54	5.00	.....	54	5.00	.....	54
	5.00			5.00			5.00			5.00			5.00			5.50			5.50		
<i>Ontario:—</i>																					
Peterborough .....	18	54		18	54		18	54		18	54		18	54		18	54		18	54	
	25	78		25	78		25	78		25	78		25	78		25	78		25	78	
Hamilton .....	4.65	15	54	4.65	15	54	4.65	15	54	4.65	15	54	4.65	15	54	4.65	15	54	4.65	15	54
London .....	10	54		10	54		10	54		10	54		13	54		13	54		13	54	
Chatham .....	5.00	10	54	5.00	10	54	5.00	10	54	5.00	10	54	5.00	10	54	5.00	10	54	5.00	10	54
<i>Saskatchewan:—</i>																					
Regina .....	10-12	60		10-12	60		12-15	60		12-15	60		12-15	60		12-15	60		12-15	60	
Prince Albert .....	15-18	56		15-18	56		15-18	56		15-18	56		15-18	56		20-24	56		20-24	56	
<i>Alberta:—</i>																					
Medicine Hat .....	6.00	.....	54	6.00	.....	54	6.00	.....	54	6.50	.....	54	6.50	.....	54	6.50	.....	54	7.00	.....	54
<i>British Columbia:—</i>																					
Nelson .....																			7.00		54
Victoria .....	7.50	20	54	7.50	20	54	7.50	20	54	7.50	20	54	7.50	20	54	8.00	24	54	8.00	24	54

## IX.—CLOTHING.

## (1) Tailors.

(a) COATMAKERS.—Continued.

LOCALITY.	1907			1908			1909			1910			1911			1912			1913		
	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week
	Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week	
	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
<i>Nova Scotia:—</i>																					
Halifax .....	4.00	12-15	54	4.00	12-15	54	4.00	12-15	54	4.50	12-15	54	4.50	12-15	54	5.00	12-15	54	5.00	12-15	54
Westville .....	4.00	.....	60	4.00	.....	60	4.00	.....	60	5.00	.....	54	5.00	.....	54	5.00	.....	54	5.50	15.00	54
	6.00			6.00			6.00			7.00			7.00			7.00			7.50		
<i>Prince Edward Island:—</i>																					
Charlottetown .....	3.75	12.00	60	3.75	12.00	60	3.75	12.00	60	3.75	12.00	60	3.75	12.00	60	3.75	12.00	60	3.75	12.00	60
<i>New Brunswick:—</i>																					
St. John .....	4.00	.....		4.00	.....		4.00	.....		4.00	.....		4.50	.....		4.50	.....				
	4.50	.....		4.50	.....		4.50	.....		4.50	.....		5.00	.....		5.00	.....				
Fredericton .....	3.00	10.00	54	3.00	10.00	54	3.00	12.00	54	3.00	12.00	54	3.00	15.00	54	4.50	15.00	54	4.50	15.00	54
	6.00			6.00			6.00			6.00			6.00			7.00			7.00		
<i>Quebec:—</i>																					
Quebec .....	2.25	.....	54	2.25	.....	54	2.50	.....	54	2.50	.....	54	2.50	.....	54	2.50	.....	54	2.50	.....	54
	2.50	.....		2.50	.....		2.75	.....	54	2.75	.....	54	2.75	.....	54	2.75	.....	54	2.75	.....	54
Three Rivers .....		15.00	55		15.00	55		15.00	55		15.00	55		15.00	55		15.00	55		15.00	55
Montreal .....	5.25	.....	54	5.50	.....	54	5.50	.....	54	5.50	.....	54	6.25	.....	54	6.50	.....	54	6.50	.....	54
	5.50						5.75			6.00			6.50						6.75		
<i>Ontario:—</i>																					
Peterborough .....	18	54		18	54		18	54		18	54		18	54		22.50	54		22.50	54	
	25	78		25	78		25	78		25	78		25	78		25	78		28.00	78	
Hamilton .....	4.65	15	54	4.65	15	54	4.65	15	54	5.50	16	54	5.50	16	54	5.50	16	54	5.50	16.00	54
London .....	13	54		13	54		13	54		15	54		15	54		15	54		15	54	
Chatham .....	5.00	10.00	54	5.00	10.00	54	6.70	15-16	54	6.70	15-16	54	6.70	15-16	54	6.70	15-16	54	6.70	15-16	54
<i>Saskatchewan:—</i>																					
Regina .....		15-18	60		15-18	60		18-22	60		19-23	60		20-24	60		20-24	54	7.50	21-25	5
Prince Albert .....		20-24	56		20-24	56		20-24	56		20-24	56		20-27	54		20-27	54		20-27	54
<i>Alberta:—</i>																					
Medicine Hat .....	7.00	.....	54	7.00	.....	54	7.00	.....	54	7.50	.....	54	7.50	.....	54	7.50	.....	54	7.50	.....	54
<i>British Columbia:—</i>																					
Nelson .....	7.00	.....	54	8.00	.....	54	8.00	.....	54	8.75	.....	54	8.75	.....	54	9.00	22	54	9.00	22	54
Victoria .....	8.00	24	54	8.00	24	54	8.25	26	54	8.25	26	54	8.25	26	54	8.50	28	54	9.00	30	54



## (b) PANTMAKERS.

LOCALITY.	1900			1901			1902			1903			1904			1905			1906		
	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week
	Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week	
<i>Nova Scotia:—</i>	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
Halifax .....	.75	54	54	.75	54	54	.75	54	54	.95	54	54	.95	54	54	.95	54	54	.95	54	54
Westville .....	.60	60	60	.60	60	60	.60	60	60	.70	60	60	.70	60	60	.70	60	60	.70	60	60
<i>Prince Edward Island:—</i>																					
Charlottetown .....	.70	60	60	.70	60	60	.70	60	60	.70	60	60	.70	60	60	.70	60	60	.70	60	60
<i>New Brunswick:—</i>																					
St. John .....	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54
Fredericton .....	.75	3.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54
<i>Quebec:—</i>																					
Quebec .....	.35	54	54	.35	54	54	.35	54	54	.35	54	54	.45	54	54	.45	54	54	.45	54	54
Three Rivers .....	6.25	55	55	6.25	55	55	6.25	55	55	6.25	55	55	6.25	55	55	7.50	55	55	7.50	55	55
Montreal .....	1.10	60	60	1.10	60	60	1.10	54	54	1.10	54	54	1.25	54	54	1.25	54	54	1.25	54	54
	1.25			1.25			1.25			1.50			1.50			1.50			1.50		
<i>Ontario:—</i>																					
Peterborough .....	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54
	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78
Hamilton .....	1.40	54	54	1.40	54	54	1.40	54	54	1.40	54	54	1.40	54	54	1.40	54	54	1.40	54	54
London .....	5.50	54	54	5.50	54	54	5.50	54	54	5.50	54	54	5.50	54	54	7.00	54	54	7.00	54	54
Chatham .....	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54
	1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00	
<i>Saskatchewan:—</i>																					
Regina .....	6.00	60	60	6.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60
										10.00			10.00			10.00			10.00		
Prince Albert .....	7-10	53	53	7-10	53	53	7	10	53	7-10	53	53	7-10	53	53	10-12	53	53	10-12	53	53
<i>Alberta:—</i>																					
Medicine Hat .....	1.75	54	54	1.75	54	54	1.75	54	54	1.75	54	54	1.75	54	54	1.75	54	54	2.00	54	54
<i>British Columbia:—</i>																					
Nelson .....																			2.50	54	54
Victoria .....	1.75	13	54	1.75	13	54	1.75	13	54	1.75	13	54	1.75	13	54	2.00	14	54	2.00	14	54

## (c) VESTMAKERS.

<i>Nova Scotia:—</i>																					
Halifax .....	.70	54	54	.70	54	54	.70	54	54	.87	54	54	.87	54	54	.87	54	54	.87	54	54
Westville .....	1.00	60	60	1.00	60	60	1.00	60	60	1.25	60	60	1.25	60	60	1.25	60	60	1.25	60	60
<i>Prince Edward Island:—</i>																					
Charlottetown .....	.75	60	60	.75	60	60	.75	60	60	.75	60	60	.75	60	60	.75	60	60	.75	60	60
<i>New Brunswick:—</i>																					
St. John .....	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54	.75	54	54
Fredericton .....	.75	3.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54	.75	4.00	54
<i>Quebec:—</i>																					
Quebec .....	.35	54	54	.35	54	54	.35	54	54	.35	54	54	.45	54	54	.45	54	54	.45	54	54
Three Rivers .....	6.25	55	55	6.25	55	55	6.25	55	55	6.25	55	55	6.25	55	55	7.50	55	55	7.50	55	55
Montreal .....	1.00	60	60	1.00	60	60	1.10	54	54	1.10	54	54	1.10	54	54	1.25	54	54	1.35	54	54
	1.25			1.25			1.25			1.25			1.25			1.35					
<i>Ontario:—</i>																					
Peterborough .....	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54	10	54	54
	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78	12	78	78
Hamilton .....	1.15	54	54	1.15	54	54	1.15	54	54	1.15	54	54	1.15	54	54	1.15	54	54	1.15	54	54
London .....	5.50	54	54	5.50	54	54	5.50	54	54	5.50	54	54	5.50	54	54	7.00	54	54	7.00	54	54
Chatham .....	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54	.75	5.00	54
	1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00		1.00	6.00	
<i>Saskatchewan:—</i>																					
Regina .....	6.00	60	60	6.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60	8.00	60	60
							10			10			10			10			10		
Prince Albert .....	7-10	53	53	7-10	53	53	7-10	53	53	7-10	53	53	7-10	53	53	10-12	53	53	10-12	53	53
<i>Alberta:—</i>																					
Medicine Hat .....	2.00	54	54	2.00	54	54	2.00	54	54	2.00	54	54	2.00	54	54	2.00	54	54	2.00	54	54
<i>British Columbia:—</i>																					
Nelson .....																			2.50	54	54
Victoria .....	1.75	12	54	1.75	12	54	1.75	12	54	1.75	12	54	1.75	12	54	2.00	14	54	2.00	14	54

## (b) PANTMAKERS.—Continued.

LOCALITY.	1907			1908			1909			1910			1911			1912			1913		
	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week
	Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week	
<i>Nova Scotia:—</i>	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
Halifax .....	.95		54	.95		54	.95		54	.95		54	.95		54	.95		54	1.00		54
Westville .....	.70		60	.70		60	.70		60	.85		54	.85		54	.85		54	1.00	14.00	54
<i>Prince Edward Island:—</i>																					
Charlottetown .....	.70		60	.70		60	.70		60	.70		60	.70		60	.70		60	.70		60
<i>New Brunswick:—</i>																					
St. John .....	.75			.75			.75			.75			.90			.90					
Fredericton .....	.90	4.00	54	.90	4.00	54	.90	4.00	54	.90	4.00	54	.90	5.00	54	1.00	5.00	54	1.00	5.00	54
<i>Quebec:—</i>																					
Quebec .....	.60		54	.60		54	.70		54	.70		54	.70		54	.70		54	.70		54
Three Rivers .....	.750		55		7.50	55		7.50	55		7.50	55		7.60	55		7.60	55		7.50	55
Montreal .....	1.35		54	1.45		54	1.45		54	1.55		54	1.65		54	1.75		54	1.75		54
	1.50			1.75			1.75			1.75			1.75			2.00					
<i>Ontario:—</i>																					
Peterborough .....	10	54		10	54		10	54		10	54		10	54		10	54		12	54	
Hamilton .....	12	78		12	78		12	78		12	78		12	78		15	78		15	78	
London .....	1.40	12	54	1.40	12	54	1.40	12	54	1.50	13	54	1.50	13	54	1.50	13	54	1.50	13	54
Chatham .....	7.00	54		7.00	54		7.00	54		8.15	54		8.15	54		8.15	54		8.15	54	
	.75	5.00	54	.75	5.00	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54
	1.00	6.00		1.00	6.00			8.00			8.00			8.00			8.00			8.00	
<i>Saskatchewan:—</i>																					
Regina .....	10-11	60		10-11	60		11-12	60		11-12	60		11-12	60		11-13	54		1.25	12-15	54
																			2.25		
Prince Albert .....	10-12	53		10-12	53		10-12	53		10-12	53		10-12	53		10-12	53		10-12	53	
<i>Alberta:—</i>																					
Medicine Hat .....	2.00		54	2.50		54	2.50		54	2.75		54	2.75		54	2.75		54	2.75		54
<i>British Columbia:—</i>																					
Nelson .....	2.50		54	2.50		54	2.50		54	3.00		54	3.00		54	3.00		54	3.00		54
Victoria .....	2.00	14	54	2.00	14	54	2.25	15	54	2.25	15	54	2.25	15	54	2.50	16	54	2.80	16.80	54

## (c) VESTMAKERS.—Continued.

<i>Nova Scotia:—</i>																					
Halifax .....	.87		54	.87		54	.87		54	.87		54	.87		54	.87		54	.87		54
Westville .....	1.25		60	1.25		60	1.25		60	1.25		54	1.25		54	1.25		54	1.25		54
	.70			.70			.70			.85			.85			.85			1.00	14.00	54
<i>Prince Edward Island:—</i>																					
Charlottetown .....	.75		60	.75		60	.75		60	.75		60	.75		60	.75		60	.75		60
<i>New Brunswick:—</i>																					
St. John .....	.75			.75			.75			.75			.80			.80					
Fredericton .....	.90	4.00	54	.90	4.00	54	.90	4.00	54	.90	4.00	54	.90	5.00	54	1.00	5.00	54	1.00	5.00	54
<i>Quebec:—</i>																					
Quebec .....	.50		54	.50		54	.60		54	.60		54	.60		54	.60		54	.60		54
Three Rivers .....		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55
Montreal .....	1.35		54	1.40		54	1.40		54	1.40		54	1.50		54	1.50		54	1.50		54
	1.45			1.45			1.55			1.55			1.65			1.75			1.75		
<i>Ontario:—</i>																					
Peterborough .....	10	54		10	54		10	54		10	54		10	54		10	54		11	54	
Hamilton .....	12	78		12	78		12	78		12	78		12	78		15	78		15	78	
London .....	1.15	11	54	1.15	11	54	1.15	11	54	1.30	12	54	1.30	12	54	1.30	12	54	1.30	12	54
Chatham .....	7.00	54		7.00	54		7.00	54		8.15	54		8.15	54		8.15	54		8.15	54	
	.75	5.00	54	.75	5.00	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54	1.50	7.50	54
	1.00	6.00		1.00	6.00			8.00			8.00			8.00			8.00			8.00	
<i>Saskatchewan:—</i>																					
Regina .....	10-11	60		10-11	60		11-12	60		11-12	60		11-12	60		11-13	54		1.85	12-15	54
																			2.25		
Prince Albert .....	10-12	53		10-12	53		10-12	53		10-12	53		10-12	53		10-12	53		10-12	53	
<i>Alberta:—</i>																					
Medicine Hat .....	2.25		54	2.25		54	2.25		54	2.25		54	2.75		54	2.75		54	2.75		54
<i>British Columbia:—</i>																					
Nelson .....	2.50		54	2.50		54	2.50		54	2.75		54	2.75		54	2.75		54	2.75		54
Victoria .....	2.00	14	54	2.00	14	54	2.25	15	54	2.25	15	54	2.25	15	54	2.50	16	54	2.70	16.20	54



## (d) LADIES' COATMAKERS.—Continued.

LOCALITY.	1907			1908			1909			1910			1911			1912			1913		
	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week	Wages.		Hrs. per week
	Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week		Piece work	Per week	
<i>Nova Scotia:—</i>	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
Halifax .....		6.00	50		6.00	50		7-8	50		7-8	50		7-8	50		7-8	50		7-8	50
Westville .....		9.00	60		9.00	60		9.00	60		9.50	54		9.50	54		9.50	54		10.00	54
<i>Prince Edward Island:—</i>																					
Charlottetown .....	3.25	6.00	54	3.25	6.00	54	3.25	6.00	54	3.25	6.00	54	3.25	6.00	54	3.25	6.00	54	3.25	6.00	54
<i>New Brunswick:—</i>																					
St. John .....		16.00			16.00			16.00			16.00			16.00			16.00			16.00	
Fredericton .....	4.00	10.00	54	4.00	10.00	54	4.00	12.00	54	4.00	12.00	54	4.00	15.00	54	5.00	15.00	54	5.00	15.00	54
		8.00			8.00			8.00			8.00			8.00			10			10	
<i>Quebec:—</i>																					
Quebec .....	2.75		54	2.75		54	2.75		54	2.75		54	2.75		54	3.00		54	3.00		54
		3.00			3.00			3.00			3.00			3.00			3.50			3.50	
Three Rivers .....		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55
Montreal .....	11.00	20.00	54	11.00	20.00	54	12.00	22.00	54	12.00	22.00	54	12.00	22.00	54	13.00	24.00	54	13.00	24.00	54
<i>Ontario:—</i>																					
Peterborough .....		6.00	54		6.00	54		6.00	54		6.00	54		6.00	54		8.00	54		10.00	54
		8.00	78		8.00	78		8.00	78		8.00	78		8.00	78		10	78		12.00	78
Hamilton .....		13.50	54		13.50	54		13.50	54		13.50	54		13.50	54		13.50	54		13.50	54
					16.20			16.20			16.20			16.20			16.20			16.20	
London .....		13.00	54		13.00	54		13.00	54		15.00	54		15.00	54		15.00	54		15.00	54
Chatham .....								7-9	54		7-9	54		7-9	54		7-9	54		7-9	54
<i>Saskatchewan:—</i>																					
Regina .....														14.00	60		15.00	54		15.00	54
Prince Albert .....		20-27	54		20-27	54		20-27	54		20-27	54		25-30	54		25-30	54		25-30	54
<i>Alberta:—</i>																					
Medicine Hat .....	9.00		54	9.00		54	9.00		54	10.00		54	10.00		54	10.00		54	10.00		54
<i>British Columbia:—</i>																					
Victoria .....	10.00	20.00	54	10.00	20.00	54	10.00	20.00	54	12.00	24.00	54	12.00	24.00	54	12.00	24.00	54	12.00	24.00	54

\*Dressmakers.

## (e) LADIES' SKIRTMAKERS.—Continued.

<i>Nova Scotia:—</i>	\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$		\$	\$	
Halifax .....		5.00	50		5.00	50		6.00	50		6.00	50		6.00	50		6.00	50		6.00	50
Westville .....		6.00	60		6.00	60		6.00	60		7.00	54		7.00	54		7.00	54		7.50	54
<i>Prince Edward Island:—</i>																					
Charlottetown .....	1.25	3.50	54	1.25	3.50	54	1.25	3.50	54	1.25	3.50	54	1.25	3.50	54	1.25	3.50	54	1.25	3.50	54
<i>New Brunswick:—</i>																					
St. John .....		8.00			8.00			8.00			8.00			8.00			8.00			8.00	
Fredericton .....	1.50	10	54	1.50	10	54	1.50	12	54	1.50	12	54	1.50	15	54	2.00	15	54	2.00	15	54
		4.00			4.00			4.00			4.00			4.00			5.00			5.00	
<i>Quebec:—</i>																					
Quebec .....	1.25		54	1.25		54	1.25		54	1.25		54	1.25		54	1.60		54	1.60		54
		1.50			1.50			1.50			1.50			1.50			2.20			2.20	
Three Rivers .....		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55		7.50	55
Montreal .....		20	54		20	54		22	54		22	54		23	54		23	54		23	54
<i>Ontario:—</i>																					
Peterborough .....		6.00	54		6.00	54		6.00	54		6.00	54		6.00	54		8.00	54		10.00	54
		8.00	78		8.00	78		8.00	78		8.00	78		8.00	78		10	78		12.00	78
Hamilton .....		8.00	54		9.00	54		9.00	54		9.00	54		10	54		10	54		10.00	54
London .....		7.00	54		7.00	54		7.00	54		8.15	54		8.15	54		8.15	54		8.15	54
Chatham .....								5-7	54		5-7	54		5-7	54		5-7	54		5-7	54
<i>Saskatchewan:—</i>																					
Prince Albert .....		10-14	53		10-14	53		10-14	53		10-14	53		12-15	53		12-15	53		12-15	53
<i>Alberta:—</i>																					
Medicine Hat .....	3.50		54	3.50		54	3.50		54	4.00		54	4.00		54	4.00		54	4.00		54
<i>British Columbia:—</i>																					
Victoria .....	3.50	12.00	54	3.50	12.00	54	3.50	12.00	54	4.50	16.00	54	4.50	16.00	54	4.50	16.00	54	4.50	16.00	54

\*Dressmakers.



## (2) Ready-made Clothing.

	1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$		Per week \$	
<b>CUTTERS:—</b>														
Montreal.....														
Toronto.....	12.00	49	12.00	49									15.00	44
Dundas.....	12.00	52	12.00	52	12.00	52	12.00	49	13.00	49	13.00	49	14.00	49
Clinton.....	13.00	59	13.00	59	14.00	59	14.00	58	14.00	58	15.00	58	15.00	58
<b>PRESSERS:—</b>														
Montreal.....														
Toronto.....	9.00	49	9.00	49									15	44
Dundas.....	11-12	52	11-12	52	11-12	52	11-12	49	12-14	49	12-14	49	12-14	49
Clinton.....	9.00	59	9.00	59	9.00	59	9.50	59	9.50	59	10.00	58	10.00	58
<b>MACHINE OPERATORS:—</b>														
Montreal.....														
Toronto.....	12	49	12	49									15	44
Dundas.....	10-12	52	10-12	52	11-12	52	11-12	49	12-13	49	12-13	49	13-14	49
<b>TRIMMERS:—</b>														
Montreal.....														
Dundas.....	9.00	52	9.00	52	10.00	52	10.00	49	11.00	49	11.00	49	12.00	49
<b>FITTER'S UP:—</b>														
Montreal.....														
Toronto.....	6.00	49	6.00	49									7.00	44
Dundas.....	10.00	52	10.00	52	10-11	52	11-12	49	12-13	49	12-13	49	12-13	49
<b>SEMGERS:—</b>														
Montreal.....														
Toronto.....	5.00	49	5.00	49									12	44
Dundas.....	5.00	52	5.00	52	5.00	52	6.00	49	6.00	49	6.00	49	7.00	49
<b>BASTERS:—</b>														
Montreal.....														
Toronto.....	9.00	49	9.00	49									12	44
Dundas.....	4.50	52	4.50	52	4.50	52	5.00	49	5.00	49	5.50	49	5.50	49
	10.00		10.00		10.00		11.00		11.00		11.00		12.00	
<b>UNDER BASTERS:—</b>														
Montreal.....														
Toronto.....	9.00	49	9.00	49									12	44
Dundas**.....	5.00	52	5.00	52	5.50	52	5.50	49	6.00	49	6.00	49	7.00	49
<b>FELLERS:—</b>														
Montreal.....														
Toronto.....	5.00	49	5.00	49									7.00	44
Dundas.....	4.00	52	4.00	52	4.50	52	4.50	49	5.00	49	5.00	49	6.00	49
<b>BUTTON-HOLE MAKERS:—</b>														
Montreal.....														
Toronto.....	8.00	49	8.00	49									8.00	44
Dundas.....	11.00	52	11.00	52	12.00	52	12.00	49	12.00	49	13.00	49	13.00	49
<b>BUTTON-SEWERS:—</b>														
Montreal.....														
Toronto.....	4.00	49	4.00	49									6.00	44
Dundas.....	3.50	52	4.00	52	4.00	52	4.50	49	4.50	49	5.00	49	5.00	49
<b>GENERAL HAND SEWERS:—</b>														
Montreal.....														
Toronto.....	4.00	49	4.00	49									7.00	44
Dundas.....	4.50	52	4.50	52	5.00	52	5.00	49	5.50	49	5.50	49	6.00	49

\*\*Girls.

## (2) Ready-made Clothing.

	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
<b>CUTTERS:—</b>														
Montreal.....	10-15	53	10-15	53	10-15	53	12-18	53	16-18	53	16-22	49	18-25	49
Toronto.....	15.00	44									20.00	44	20.00	44
Dundas.....	14.00	49	15.00	49	16.00	49	16.00	49	17.00	49	17.00	49	18.00	49
Clinton.....	16.00	58	16.00	58	16.00	58	17.00	58	17.00	50	17.00	50		
<b>PRESSERS:—</b>														
Montreal.....	16-18	53	16-18	53	16-18	53	18-20	53	20-25	53	22-30	49	22-30	49
Toronto.....	15.00	44									17.00	44	17.00	44
Dundas.....	13-15	49	13-15	49	13-15	49	14-16	49	14-16	49	15-18	49	15-18	49
Clinton.....	10.00	58	11.00	58	11.00	58	12.00	58	12.00	50	12.00	50		
<b>MACHINE OPERATORS:—</b>														
Montreal.....	14-18	53	14-18	53	14-18	53	16-20	53	16-22	53	16-24	49	16-24	49
Toronto.....	15.00	44									17.00	44	17.00	44
Dundas.....	13-14	49	14-15	49	15-16	49	16-18	49	16-18	49	17-20	49	18-22	49
<b>TRIMMERS:—</b>														
Montreal.....	8-10	53	8-10	53	8-12	53	8-12	53	12-14	53	12-15	49	15.00	49
Dundas.....	13.00	49	13.00	49	14.00	49	14.00	49	15.00	49	16.00	49	17.00	49
<b>FITTER'S UP:—</b>														
Montreal.....	12-14	53	12-14	53	12-14	53	14-16	53	16-20	53	16-20	49	16-20	49
Toronto.....	7.00	44									13.00	44	13.00	44
Dundas.....	13-14	49	13-14	49	13-14	49	14-15	49	14-15	49	15-16	49	15-16	49
<b>SERGERS:—</b>														
Montreal*.....	5.00	53	5.00	53	5.00	53	6.00	53	8.00	53	8.00	49	8.00	49
Toronto.....	12.00	44									14.00	44	14.00	44
Dundas.....	7.00	49	7.50	49	7.50	49	8.00	49	8.00	49	9.00	49	9.00	49
<b>BASTERS:—</b>														
Montreal.....	10-12	53	10-12	53	10-12	53	12-14	53	12-14	53	16-18	49	16-20	49
Toronto.....	12.00	44									16.00	44	16.00	44
Dundas.....	6-12	49	7-12	49	7-13	49	8-13	49	8-13	49	9-14	49	10-15	49
<b>UNDER BASTERS:—</b>														
Montreal.....	10-12	53	10-12	53	10-12	53	10-12	53	12-14	53	12-14	49	12-14	49
Toronto.....	12.00	44									15.00	44	15.00	44
Dundas.....	7.00	49	8.00	49	8.00	49	9.00	49	9.00	49	10.00	49	10.00	49
<b>FELLERS:—</b>														
Montreal*.....	5-7	53	5-7	53	5-7	53	6-8	53	6-8	53	7-10	49	9-14	49
Toronto.....	7.00	44									9.00	44	9.00	44
Dundas.....	6.00	49	6.00	49	7.00	49	7.00	49	8.00	49	8.00	49	8 9	49
<b>BUTTON-HOLE MAKERS:—</b>														
Montreal†.....	14.00	53	14.00	53	14.00	53	16.00	53	18.00	53	20.00	49	23.00	49
Toronto.....	8.00	44									10.00	44	10.00	44
Dundas.....	14.00	49	14.00	49	15.00	49	16.00	49	16.00	49	17.00	49	18-19	49
<b>BUTTON-SEWERS:—</b>														
Montreal.....	4.50	53	5.40	53	4.50	53	5.00	53	6.00	53	7.50	49	8.00	49
Toronto.....	6.00	44									8.00	44	8.00	44
Dundas.....	5.50	49	5.50	49	6.00	49	6.00	49	6.50	49	7.00	49	7.50	49
<b>GENERAL HAND SEWERS:—</b>														
Montreal**.....	5-7	53	5-7	53	5-7	53	6-8	53	7-10	53	7-10	49	8-12	49
Toronto.....	7.00	44									9.00	44	9.00	44
Dundas.....	6.50	49	7.00	49	7.50	49	8.00	49	8.50	49	9.00	49	9-10	49

\*Girls and boys.

\*\*Girls.

†Machine operators.



**(3) Whitewear.**

[illegible]

**(4) Shirts.**

[illegible]

## (3) Whitewear.

	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
FOREMEN:—														
Montreal.....	27	50	27	50	27	50	27.50	48½	27.50	48½	27.50	48½	27.50	48½
FOREWOMEN:—														
Montreal.....	14	50	14	50	14	50	15.33	48½	15.33	48½	15.33	48½	15.33	48½
Winnipeg.....	10	49	10	49	12	49	12	49	13	49	13.50	49	15	49
DESIGNERS:—														
Montreal.....	33.00	50	33.00	50	33.00	50	35.00	48½	35.00	48½	35.00	48½	35.00	48½
MEN CUTTERS:—														
Montreal.....	20	50	20	50	20	50	23.25	48½	23.25	48½	23.25	48½	23.25	48½
TRIMMERS:—														
Montreal.....	7.50	50	7.50	50	7.50	50	7.50	48½	7.50	48½	7.50	48½	7.50	48½
OPERATORS:—														
Montreal.....	7.50	50	7.50	50	7.50	50	7.80	48½	7.80	48½	7.80	48½	7.80	48½
Winnipeg.....	6-15	49	6-15	49	6-15	49	7-18	49	7-18	49	7-18	49	7-18	49
EXAMINERS:—														
Montreal.....	6.50	50	6.50	50	6.50	50	7.00	48½	7.00	48½	7.00	48½	7.00	48½
Winnipeg.....	5-10	49	5-10	49	5-10	49	5-10	49	6-10	49	6-10	49	6-10	49
PRESSERS:—														
Montreal.....	7.00	50	7.00	50	7.00	50	7.00	48½	7.00	48½	7.00	48½	7.00	48½
Winnipeg.....	7.00	49	7.00	49	7.00	49	7.00	49	8.00	49	8.00	49	8.00	49
STOCK CLERKS, ETC.:—														
Montreal.....	15.00	50	15.00	50	15.00	50	16.50	48½	16.50	48½	16.50	48½	16.50	48½

## (4) Shirts.

STOCK-ROOM STAFF:—														
Montreal.....	10.50	50	11.00	50	11.50	50	11.50	50	13.00	50	13.00	46¾	13.00	46¾
CUTTERS:—														
Montreal.....	15.00	52½	16.50	52½	18.00	52½	20.00	52½	20.00	52½	21.00	49½	22.00	49½
BUTTON-HOLE SEWERS:—														
Montreal.....	6.50	52½	7.00	52½	7.50	52½	8.00	52½	8.50	52½	9.00	49½	9.00	49½
BOXING-ROOM MEN:—														
Montreal.....	8.50	50	8.50	50	8.50	50	9.00	50	9.00	50	9.50	46¾	10.00	46¾
IRONERS:—														
Montreal.....	8.50	52½	9.00	52½	9.50	52½	10.50	52½	11.00	52½	12.00	49½	12.00	49½
WASHERS:—														
Montreal.....	12.50	52½	13.50	52½	13.50	52½	14.00	52½	14.00	52½	15.00	49½	15.00	49½
PRESSERS & FOLDERS:—														
Montreal.....	6.00	52½	6.00	52½	6.50	52½	7.00	52½	7.50	52½	8.00	49½	8.00	49½
EXAMINERS:—														
Montreal.....	6.60	52½	6.60	52½	6.60	52½	6.60	52½	7.25	52½	7.25	49½	7.25	49½
SHIPPERS:—														
Montreal.....	12.00	52½	12.50	52½	13.50	52½	14.00	52½	14.00	52½	15.00	49½	15.00	49½

## (5) Furs.

	1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
<b>DESIGNERS:—</b>														
Quebec.....	25.00	54	25.00	54	25.00	54	30.00	54	30.00	54	30.00	54	35.00	54
Toronto.....	25.00	46½	27.00	46½	30.00	46½	35.00	46½	35.00	46½	40.00	46½	40.00	46½
<b>CUTTERS:—</b>														
Quebec.....	16.00	54	16.00	54	16.00	54	16.50	54	16.50	54	16.50	54	17.00	54
Montreal.....	14.00	52	15.00	52	15.00	52	15.00	52	16.00	52	16.00	52	16.50	52
Toronto.....	11.50	46½	11.70	46½	12.00	46½	12.00	46½	12.00	46½	12.00	46½	12.80	46½
<b>BLOCKERS:—</b>														
Quebec.....	8.00	54	8.00	54	8.00	54	8.50	54	8.50	54	9.00	54	9.50	54
Montreal.....	5.00	52	6.00	52	6.00	52	6.00	52	6.50	52	6.50	52	6.50	52
Toronto.....	3.50	46½	4.00	46½	5.00	46½	6.00	46½	6.50	46½	6.50	46½	7.00	46½
<b>FINISHERS:—</b>														
Quebec.....	7.50	54	7.50	54	7.50	54	7.50	54	7.50	54	8.00	54	8.50	54
Montreal.....	6.50	52	6.50	52	7.00	52	7.00	52	7.50	52	7.50	52	7.50	52
Toronto.....	5.50	46½	6.00	46½	6.45	46½	7.00	46½	7.65	46½	8.00	46½	8.70	46½
<b>MACHINE OPERATORS:—</b>														
Quebec.....	6.00	54	6.00	54	6.00	54	7.00	54	7.50	54	8.00	54	8.00	54
Montreal.....	7.00	52	7.50	52	7.50	52	7.50	52	7.50	52	8.00	52	8.00	52
Toronto.....	5.20	46½	5.50	46½	5.70	46½	6.40	46½	7.00	46½	7.40	46½	8.20	46½
<b>TRIMMERS:—</b>														
Montreal.....	6.00	52	6.00	52	6.50	52	7.00	52	7.00	52	7.00	52	7.00	52

## (6) Boots and Shoes.

<b>CUTTERS:—</b>														
Fredericton.....	12	60-a												
Quebec.....													13.85	55
Three Rivers.....	8.00		8.00		8.00		9.00		9.00		9.00		9.00	
	9.00	60	9.00	60	9.00	60	10	60	10	60	10	60	10	60
Montreal.....	10		10		10		11		11		11		11	
Toronto.....	10	60	10	60	12	60	13.50	60	13.50	60	13.50	60	13	60
<b>LASTERS:—</b>														
Fredericton.....	13.50	60 a												
Quebec.....													13.60	55
Three Rivers.....	8.00		8.00		8.00		9.00		9.00		9.00		9.00	
	9.00	60	9.00	60	9.00	60	10	60	10	60	10	60	10	60
Montreal.....	10		10		10		11		11		11		11	
Toronto.....														
<b>STITCHERS:—</b>														
Quebec.....													18	55
Three Rivers.....	10		10		10		10		10		11		11	
	11	60	11	60	11	60	11	60	11	60	12	60	12	60
Montreal.....	12		12		12		12		12		13		13	
Toronto.....														
<b>TREES &amp; DRESSERS:—</b>														
Fredericton.....	11	60a												
Quebec.....													20.25	55
Three Rivers.....	6.00		7.00		7.00		7.00		7.00		7.00		8.00	
	7.00	60	8.00	60	8.00	60	8.00	60	8.00	60	8.00	60	9.00	60
Montreal.....			9.00		9.00		9.00		9.00		9.00		10	
Toronto.....														

(a) Gradual increase, 1900-1912.

## (5) Furs.

	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
<b>DESIGNERS:—</b>														
Quebec.....	35.00	54	35.00	54	35.00	54	40.00	54	40.00	54	40.00	54	40.00	54
Toronto.....	45.00	46½	50.00	46½	60.00	46½	60.00	46½	60.00	46½	60.00	46½	60.00	46½
<b>CUTTERS:—</b>														
Quebec.....	17.00	54	17.00	54	17.50	54	18.50	54	19.00	54	19.50	54	20.00	54
Montreal.....	16.50	52	16.50	52	17.00	52	17.00	52	17.00	52	18.00	52	18.00	49
Toronto.....	13.70	46½	15.25	46½	16.75	46½	16.75	46½	18.20	46½	18.20	46½	18.50	46½
<b>BLOCKERS:—</b>														
Quebec.....	9.50	54	10.00	54	10.00	54	10.00	54	10.50	54	11.10	54	12.00	54
Montreal.....	7.00	52	7.00	52	8.00	52	8.00	52	8.00	52	9.00	52	9.00	49
Toronto.....	7.20	46½	8.00	46½	8.65	46½	8.65	46½	9.35	46½	9.35	46½	9.85	46½
<b>FINISHERS:—</b>														
Quebec.....	8.50	54	9.00	54	9.50	54	9.50	54	10.00	54	10.00	54	10.50	54
Montreal.....	8.00	52	8.00	52	8.00	52	9.00	52	9.00	52	10.00	52	10.00	49
Toronto.....	9.50	46½	10.50	46½	11.60	46½	11.60	46½	12.60	46½	12.60	46½	13.00	46½
<b>MACHINE OPERATORS:—</b>														
Quebec.....	8.50	54	8.50	54	9.00	54	9.50	54	9.50	54	10.00	54	10.00	54
Montreal.....	8.00	52	8.00	52	9.00	52	9.00	52	9.00	52	10.00	52	10.00	49
Toronto.....	9.00	46½	10.00	46½	11.05	46½	11.05	46½	12.00	46½	12.00	46½	12.50	46½
<b>TRIMMERS:—</b>														
Montreal.....	8.00	52	8.00	52	8.50	52	9.00	52	9.00	52	10.00	52	10.00	49

## (6) Boots and Shoes.

<b>CUTTERS:—</b>														
Fredericton.....													16.50	59
Quebec.....	14.50	55	15.35	55	16.20	55	16.20	55	16.50	55	17	55	17	55
	10		10		10		10		10		10		10	
Three Rivers.....	11	60	11	60	11	60	11	60	11	60	15	60	15	60
	12		12		12		12		12		12		12	
Montreal.....	12-13	60	13-14	60	13-15	59	13-16	59	13-16	59	16-18	59	16-18	59
Toronto.....			16	52	16	52	16	52	16	52	16	52	16	52
<b>LASTERS:—</b>														
Fredericton.....													18.00	59
Quebec.....	15.30	55	15.30	55	16.25	55	16.65	55	16.65	55	17.40	55	18.50	55
	9.00		10		10		10		10		10		10	
Three Rivers.....	11	60	11	60	11	60	11	60	11	60	14	60	14	60
	11		12		12		12		12		12		12	
Montreal.....									*12-27	59	12-27	59	12-33	59
Toronto.....			c15	52	15	52	15	52	15	52	15	52	15	52
<b>STITCHERS:—</b>														
Quebec.....	18	55	18	55	18	55	18	55	18	55	19.80	55	19.80	55
	11		11		11		11		11		11		11	
Three Rivers.....	12	60	12	60	12	60	12	60	12	60	12	60	12	60
	13		13		15		15		15		15		15	
Montreal.....									*18-26	59	18-26	59	18-26	59
Toronto.....			c8	52	8.00	52	8.00	52	8.00	52	8.00	52	8.00	52
<b>MAKERS &amp; DRESSERS:—</b>														
Fredericton.....													15	59
Quebec.....	26.50	55	26.50	55	26.50	55	28.50	55	28.50	55	30.50	55	30.50	55
	8.00		8.00		8.00		8.00		8.00		8.00		8.00	
Three Rivers.....	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60	9.00	60
	10		10		10		10		10		11		11	
Montreal.....									†13-16	59	13-60	59	13-18	59
Toronto.....			12	52	12	52	12	52	12	52	12	52	12	52

\* About same as in previous years.

† About \$15.00 per week previously.

## (6) Boots and Shoes.—(Continued.)

	1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
EDGE TRIMMERS:—														
Fredericton.....	15-16	60 a												
Quebec.....	{ 9.00		10.00		10.00		10.00		10.00		10.00		16.25	55
Three Rivers.....	{ 10	60	11.00	60	11.00	60	11.00	60	11.00	60	11.00	60	10.00	
	{ 11		12.00		12.00		12.00		12.00		12.00		11.00	60
Montreal.....													12.00	
Toronto.....														
WELTERS:—														
Fredericton.....	15.00	60 a												
	{ 10		10.00		10.00		10.00		10.00		11.00		11.00	
Three Rivers.....	{ 11	60	11.00	60	11.00	60	11.00	60	11.00	60	12.00	60	12.00	60
	{ 12		12.00		12.00		12.00		12.00		12.00		13.00	
Montreal.....														
Toronto.....														
EDGE SETTERS:—														
Fredericton.....	13.50	60 a												
Quebec.....													17	55
	{ 10		10.00		10.00		10.00		10.00		11.00		11.00	
Three Rivers.....	{ 11	60	11.00	60	11.00	60	11.00	60	11.00	60	12.00	60	12.00	60
	{ 12	60	12.00	60	12.00		12.00		12.00		13.00		13.00	
Montreal.....														
Toronto.....														
MACHINE OPERATORS:—														
Fredericton.....	6-12	60 a												
Quebec.....													20	55
	{ 8.00		8.00		8.00		8.00		9.00		9.00		9.00	
Three Rivers.....	{ 9.00	60	9.00	60	9.00	60	9.00	60	10.00	60	10.00	60	10.00	60
	{ 10		10.00		10.00		10.00		10.60		11.00		11.00	
Montreal.....														
Toronto.....														
FINISHERS:—														
Fredericton.....	11-12	60a												
Quebec.....													22.50	55
	{ 8.00		8.00		9.00		9.00		9.00		9.00		9.00	
Three Rivers.....	{ 9.00	60	9.00	60	10.00	60	10.00	60	10.00	60	10.00	60	10.00	60
	{ 10		10.00		11.00		11.00		11.00		11.00		11.00	
Montreal.....	8-12	60 b												
Toronto.....														

(a) Gradual increase 1900 to 1912.

(b) Gradual increase 1900 to 1911.

## (6) Boots and Shoes.—(Continued.)

	1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	\$		\$		\$		\$		\$		\$		\$	
EDGE TRIMMERS:—														
Fredericton.....													18-21	59
Quebec.....	18.50	55	18.50	55	18.50	55	22.60	55	22.60	55	23.00	55	25.00	55
	10		10.00		10.00		10.00		10.00		10.00		10.00	
Three Rivers.....	14	60	14.00	60	15.00	60	15.00	60	15.00	60	16.00	60	16.00	60
Montreal.....									*18-27	59	18.33	59	18.36	59
Toronto.....			18.00	52	18.00	52	18.00	52	18.00	52	18.00	52	18.00	52
WELTERS:—														
Fredericton.....													21.00	29
	11		11.00		11.00		11.00		11.00		12.00		12.00	
Three Rivers.....	12	60	12.00	60	12.00	60	12.00	60	12.00	60	15.00	60	15.00	60
	13		13.00		13.00		13.00		13.00					
Montreal.....									*18-33	59	18.33	59	18.37	59
Toronto.....			18.00	52	18.00	52	18.00	52	18.00	52	18.00	52	18.00	52
EDGE SETTERS:—														
Fredericton.....													18.00	59
Quebec.....	17	55	17.50	55	17.50	55	20.50	55	20.50	55	25.00	55	25.00	55
	11		11.00		11.00		11.00		11.00		11.00		11.00	
Three Rivers.....	12	60	12.00	60	12.00	60	12.00	60	12.00	60	15.00	60	15.00	60
	13		13.00		13.00		13.00		14.00					
Montreal.....									*18-30	59	18-32	59	18-35	59
Toronto.....			20.00	52	20.00	52	20.00	52	20.00	52	20.00	52	20.00	52
MACHINE OPERATORS:—														
Fredericton.....													9-18	59
Quebec.....	23.60	55	23.60	55	23.60	55	26.00	55	26.00	55	30.00	55	32.00	55
	9.00		9.00		9.00		9.00		9.00		9.00		9.00	
Three Rivers.....	10	60	12.00	60	12.00	60	12.00	60	12.00	60	13.00	60	13.00	60
	11													
Montreal.....									*15-30	59	15-30	59	15-30	59
Toronto.....			15.00	52	15.00	52	15.00	52	15.00	52	15.00	52	15.00	52
FINISHERS:—														
Fredericton.....													15.00	59
Quebec.....	22.50	55	22.50	55	22.50	55	23.00	55	23.00	55	28.00	55	30.00	55
	9.00		9.00		9.00		9.00		9.00		9.00		9.00	
Three Rivers.....	10	60	10.00	60	12.00	60	12.00	60	12.00	60	12.00	60	15.00	60
	11		11.00											
Montreal.....									12-16	59	15-18	59	15-18	59
Toronto.....			18.00	52	18.00	52	18.00	52	18.00	52	18.00	52	18.00	52

(a) Gradual increase 1900 to 1911, since then greater.

\*About same price paid in previous years.



**X.—TEXTILE.****(1) Cotton Factories.****VALLEYFIELD, QUE.**

CLASS.	Unit.		1900		1901		1902		1903		1904		1905		1906	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
Carders (male)..	Week.	wk..	8.81	60	8.81	60	8.81	60	8.81	60	8.81	60	8.81	60	8.81	60
Ring spinners, (female).....	"	"	7.15	60	7.15	60	7.15	60	7.15	60	7.15	60	7.15	60	7.15	60
W i n d e r s (female).....	"	"	6.60	60	6.60	60	6.60	60	6.60	60	6.60	60	6.60	60	6.60	60
Weavers (male and female)...	"	"	8.12	60	8.12	60	8.12	60	8.12	60	8.12	60	8.12	60	8.12	60
Loom - fixers (male).....	"	"	11.73	60	11.73	60	11.73	60	11.73	60	11.73	60	11.73	60	11.73	60

**HAMILTON, ONT.**

Carders (male) .	Week.	wk..	5.60	60	5.50	60	5.85	60	7.20	60	7.40	60	6.90	60	7.40	60
Ring spinners (female).....	"	"	4.00	60	4.35	60	4.35	60	5.40	60	5.40	60	5.40	60	5.50	60
W i n d e r s (female).....	"	"	5.20	60	4.00	60	4.80	60	5.65	60	7.10	60	5.70	60	6.75	60
Weavers (male and female)...	"	"	7.45	60	7.85	60	7.65	60	8.50	60	8.50	60	8.40	60	8.65	60
Loom fixers- (male).....	"	"	11.70	60	11.60	60	11.60	60	12.30	60	13.05	60	11.80	60	12.05	60

## X.—TEXTILE.

## (1) Cotton Factories.

VALLEYFIELD, QUE.—*Continued.*

CLASS.	Unit.		1907		1908		1909		1910		1911		1912		1913	
	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per		\$		\$		\$		\$		\$		\$		\$	
Carders (male) ..	Week.	wk..	10.13	60	9.12	60	9.12	60	9.12	60	9.12	58	9.80	58	9.80	55
Ring spinners, (female).....	"	"	8.22	60	7.40	60	7.40	60	7.40	60	7.40	58	7.95	58	7.95	55
W i n d e r s (female).....	"	"	7.60	60	6.84	60	6.84	60	6.84	60	6.84	58	7.35	58	7.35	55
Weavers (male and female) ..	"	"	9.33	60	8.40	60	8.40	60	8.40	60	8.40	58	9.00	58	9.00	55
Loom - fixers (male) .....	"	"	13.48	60	12.15	60	12.15	60	12.15	60	12.15	58	13.05	58	13.05	55

HAMILTON, ONT.—*Continued.*

Carders (male) ..	Week.	wk..	7.00	57	7.00	57	7.15	57	7.25	57	7.25	57	8.00	57	10	57
Ring spinners (female).....	"	"	6.60	57	6.30	57	6.60	57	6.35	57	6.65	57	7.15	57	7.40	57
W i n d e r s (female).....	"	"	6.35	57	8.00	57	7.30	57	5.95	57	6.50	57	7.35	57	7.50	57
Weavers (male and female) ..	"	"	8.80	57	8.25	57	8.40	57	8.00	57	8.15	57	8.60	57	8.50	57
Loom fixers- (male) .....	"	"	12.60	60	12.05	57	13.20	57	12.65	57	13.15	57	13.95	57	14.70	57

## (2) Woollen Mills.

## WOOL SORTERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Sherbrooke, Que....	Day..	1.10- 1.15- 1.25- 1.35	60	1.15- 1.25- 1.35	60	1.15- 1.25- 1.35	60	1.15- 1.25- 1.40	60	1.15- 1.25- 1.40	60	1.25- 1.40- 2.00	60	1.25- 1.40- 2.00	60
Brantford, Ont.....	Day..	1.00- 1.25	60	1.00- 1.25	60	1.00- 1.25	60	1.00- 1.25	60	1.25- 1.25	60	1.25- 1.25	60	1.25- 1.25	57½
Preston, Ont.....	Hour..	0.12- 0.16- 0.28	58	0.12- 0.16- 0.28	58	0.12- 0.16- 0.28	58	0.13- 0.17- 0.28	58	0.14- 0.18- 0.28	58	0.14- 0.18- 0.28	58	0.14- 0.18- 0.28	58

## MALE SPINNERS.

Sherbrooke, Que....	Day..	1.75- 2.00	60	1.75- 2.00	60	1.75- 2.00	60	1.75- 2.00	60	1.75- 2.00	60	1.75- 2.00	60	1.75- 2.00	60
Brantford, Ont.....	Day..							1.25- 1.50	60	1.25- 1.40	60	1.25- 1.40	60	1.25- 1.50	57½
Preston, Ont.....	Hour..	0.12- 0.16- 0.26	58	0.12- 0.16- 0.26	58	0.13- 0.17- 0.26	58	0.13- 0.17- 0.26	58	0.14- 0.18- 0.26	58	0.14- 0.18- 0.26	58	0.14- 0.18- 0.26	58

## WEAVERS.

Sherbrooke, Que....	Day..	1.00- 1.10- 1.37	60	1.00- 1.10- 1.37	60	1.15- 1.10- 1.37	60	1.20- 1.10- 1.37	60	1.25- 1.25- 1.37	60	1.35- 1.25- 1.37	60	1.35- 1.25- 1.37	60
Brantford, Ont.....	Day..							0.75- 1.00	60	1.00- 1.25	60	0.75- 1.25	60	0.75- 1.25	60
Preston, Ont.....	Hour..	0.12- 0.16- 0.26	58	0.12- 0.16- 0.26	58	0.12- 0.17- 0.26	58	0.12- 0.17- 0.26	58	0.12- 0.18- 0.26	58	0.12- 0.18- 0.26	58	0.12- 0.18- 0.26	58

## DYERS.

Sherbrooke, Que....	Day..	1.00- 1.10- 1.37	60	1.00- 1.10- 1.37	60	1.00- 1.10- 1.37	60	1.00- 1.10- 1.37	60	1.10- 1.25- 1.37	60	1.10- 1.25- 1.37	60	1.25- 1.35- 1.40	60
Brantford, Ont.....	Day..							1.15- 1.25	60	1.15- 1.25	60	1.25- 1.25	60	1.25- 1.35	57½
Preston, Ont.....	Hour..	0.12- 0.16- 0.26	58	0.12- 0.16- 0.26	58	0.13- 0.17- 0.26	58	0.13- 0.17- 0.26	58	0.14- 0.18- 0.26	58	0.14- 0.18- 0.26	58	0.14- 0.18- 0.26	58

## (2) Woollen Mills.

## WOOL SORTERS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Sherbrooke, Que. ....	Day ..	2.00	60	2.00	57	2.00	57	2.00	57	2.00	57	2.00	57	2.00	55
Brantford, Ont. ....	Day ..	1.00- 1.25	57½	1.00- 1.25	55	1.00- 1.25	55	1.00- 1.25	55	1.00- 1.40	55	1.50- 1.75	55	1.50- 1.80	55
Preston, Ont. ....	Hour..	0.16- 0.20- 0.32	56	0.16- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17½- 0.22- 0.30- 0.35	56	0.17½- 0.22- 0.30- 0.35	56

## MALE SPINNERS.—Continued.

Sherbrooke, Que. ....	Day ..	2.00- 1.50- 1.75	60	2.00- 1.50- 1.75	57	2.00- 1.50- 1.75	57	2.00- 1.50- 1.75	57	2.00- 1.50- 2.00	57	2.00- 1.75- 2.25	57	1.85- 2.00- 2.25	57
Brantford, Ont. ....	Day ..	1.50- 1.75	57½	1.50- 1.75	55	1.50- 1.75	55	1.50- 1.75	55	1.50- 2.00	55	1.75- 2.25	55	1.90- 2.25	55
Preston, Ont. ....	Hour..	0.16- 0.20- 0.27	56	0.16- 0.20- 0.27	56	0.17- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17½- 0.23- 0.32	56	0.17½- 0.23- 0.35	56	0.17½- 0.23- 0.35	56

## WEAVERS.—Continued.

Sherbrooke, Que. ....	Day ..	1.35- 1.30- 1.45	60	1.40- 1.30- 1.45- 1.50	57	1.40- 1.30- 1.45- 1.50	57	1.50- 1.30- 1.45- 1.60	57	1.50- 1.30- 1.45- 1.60	57	1.50- 1.50- 1.60- 1.75	57	1.60- 1.50- 1.60- 1.75	55
Brantford, Ont. ....	Day ..	0.75- 1.25	57½	0.75- 1.25	55	0.75- 1.25	55	0.75- 1.25	55	0.75- 1.25	55	1.00- 1.25	55	1.00- 1.60	55
Preston, Ont. ....	Hour..	0.13- 0.20- 0.27	56	0.13- 0.20- 0.27	56	0.14- 0.20- 0.32	56	0.14- 0.20- 0.32	56	0.15- 0.20- 0.32	56	*8.00- 10	56	*8.00- 10	56

\*Wages per week.

## DYERS.—Continued.

Sherbrooke, Que. ....	Day ..	1.25- 1.30- 1.45	60	1.25- 1.30- 1.45- 1.50	57	1.25- 1.30- 1.45- 1.50	57	1.25- 1.30- 1.45- 1.60	57	1.25- 1.30- 1.45- 1.60	57	1.25- 1.50- 1.60- 1.75	57	1.30- 1.50- 1.60- 1.75	57
Brantford, Ont. ....	Day ..	1.25- 1.35	57½	1.25- 1.35	55	1.25- 1.35	55	1.25- 1.35	55	1.25- 1.35	55	1.50- 1.75	55	1.50- 1.75	55
Preston, Ont. ....	Hour..	0.16- 0.20- 0.27	56	0.16- 0.20- 0.27	56	0.17- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17- 0.20- 0.32	56	0.17½- 0.20- 0.35	56	0.17½- 0.20- 0.35	56

KNITTERS.

[illegible]

(1) **Tanneries.**

**FLESHERS.**

[illegible]

\*Wages for overtime same as day rates. Saturday labour 9 hours with full day's pay.

**\*\*Wages for overtime 10 per cent advance on day work. Saturday labour 9 hours with full day's pay.**

LIQUORMEN.

[illegible]

## SORTERS.

[illegible]

IRONERS.

[illegible]

## (3) Knitting Mills.

KNITTERS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Galt, Ont. ....	Day ..	1.00	10	1.00	10	1.00	10	1.00	10	1.25	10	1.25	10	1.25	10
Guelph, Ont. ....	Week.	5.00— 8.00	50	5.00— 8.00	50	5.00— 8.00	50	6.00— 9.00	50	6.00— 9.00	50	6.00— 9.00	50	6.00— 9.00	50
Glen Williams, Ont..	Day ..	1.25— 1.50	60	1.25— 1.50	60	1.25— 1.50	60	1.25— 1.50	60	1.25— 1.50	60	1.25— 1.50	60	1.25— 1.75	60

## XI.—LEATHER.

## (1) Tanneries.

FLESHERS.—Continued.

St. Hyacinthe, Que†	Day ..	1.40	10	1.50	10	1.50	10	1.50	10	1.67	10	1.67	10	1.67	10
Hamilton, Ont.* ....	Day ..	1.33	10	1.50	10	1.50	10	1.66	10	1.66	10	1.75	10	1.75	10
Oshawa, Ont.** .....	Day ..	2.00	10	2.00	10	2.00	10	2.50	10	2.50	10	2.50	10	2.50	10

†Wages for overtime same as day rate. Saturday labour 9 hours with full day's pay.

\*Wages for overtime same as day rates. Saturday labour 9 hours with full day's pay.

\*\*Wages for overtime 10 per cent advance on day work. Saturday labour 9 hours with full day's pay.

LIQUORMEN.—Continued.

St. Hyacinthe, Que..	Day ..	1.25	10	1.25	10	1.50	10	1.50	10	1.50	10	1.50	10	1.50	10
Hamilton, Ont. ....	Day ..	1.33	10	1.50	10	1.50	10	1.66	10	1.66	10	1.75	10	1.75	10
Oshawa, Ont. ....	Day ..	1.50	10	1.50	10	1.50	10	2.00	10	2.00	10	2.00	10	2.00	10

SORTERS.—Continued.

St. Hyacinthe, Que..	Day ..	1.50	10	1.50	10	1.50	10	1.67	10	1.67	10	1.67	10	1.67	10
Oshawa, Ont. ....	Day ..	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10

IRONERS.—Continued.

St. Hyacinthe, Que..	Day ..	1.25	10	1.50	10	1.50	10	1.50	10	1.67	10	1.67	10	1.67	10
Hamilton, Ont. ....	Day ..	1.66	10	1.66	10	1.75	10	1.75	10	1.75	10	1.83	10	1.83	10
Oshawa, Ont. ....	Day ..	2.00	10	1.00	10	2.00	10	2.00	10	2.00	10	2.00	10	2.00	10



**(2) Leather Manufacturing (Horse Goods).**

## HARNESS MAKERS.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Sackville, N.B.	Day											1.25	10	1.25	10
Smith's Falls, Ont.	Week									8.50- 10.00	59	9.00 10.00	58	9.00- 11.00	59
St. Catharines, Ont.	Week	9.00	10	9.00	10	9.00	10	9.00	10	10.00	10	10.00	10	10.00	10

## XII.—BREWING AND DISTILLING.

(a) **Brewing.**

BOTTLERS. (Machine operators.)

[illegible]

DRIVERS, (of two horses.).

[illegible]

## (2) Leather Manufacturing (Horse Goods):

HARNESS MAKERS.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Sackville, N.B. ....	Day ..	1.25	10	1.50	10	1.50	10	1.67	10	1.67	10	1.67	10	1.67	10
Smith's Falls, Ont. . .	Week.	9.50- 11	59	9.00- 11.00	59	11.00- 12.00	59	11.00- 12.00	59	11.00- 13.00	59	11.00- 15.00	59	11.00- 15.00	59
St. Catharines, Ont.	Week.	10.00	10	10.00	10	10.00	10	10.00	10	11.00	10	12.00	10	13.00	10

## XII.—BREWING AND DISTILLING.

## (a) Brewing.

BOTTLERS. (Machine Operators).—Continued.

Halifax, N.S. ....	Week.	8.00	60	8.00	60	8.00	60	9.00	60	9.00	60	9.00	60	9.00	60
St. John, N.B. ....	Week.	7.00 8.00	60	7.00- 8.00	60	7.00- 8.00	55	8.00- 9.00	55	8.00- 9.00	55	8.00- 9.00	55	9.00- 10.00	55
Sudbury, Ont. ....	Week.	.....	.....	10-50	60	10.50	60	11.10	60	11.10	60	12.00	60	12.00	60
St. Catharines, Ont..	Week.	8.00	54	8.00	54	9.00	54	9.50	54	9.50	54	11.00	54	11.00	54
Winnipeg, Man. ....	Month and Week	40	60	40	60	40	60	45	60	15	60	15.00	53	16.00	53
Saskatoon, Sask. ....	Week.	15- 16.50	60	15- 16.50	60	15- 16.50	60	15.00- 18.00	60	16.50 18.00	60	16.50 18.00	60	15.00- 18.00	60
Lethbridge, Alta. ....	Day ..	3.00	9	3.00	9	3.25	8	3.25	8	3.25	8	3.25	8	3.25	8
Fernie, B.C. ....	Day ..	.....	.....	.....	.....	3.25	8	3.25	8	3.50	8	3.50	8	3.75	8

DRIVERS, (of two horses).—Continued.

Halifax, N.S. ....	Week.	10	60	10	60	10	60	10	60	10	60	10	60	10.50	60
St. John, N.B. ....	Week.	15	60	15	60	15	60	15	56	15	56	15	56	15	56
Guelph, Ont. ....	Month	45	.....	45	.....	45	.....	45	.....	50	.....	50	.....	50	.....
Sudbury, Ont. ....	Month	.....	.....	55	60	60	60	60	60	60	60	65	60	65	60
St. Catharines, Ont..	Week.	8	60	8	60	9	60	10	60	10	60	12	60	12	60
Winnipeg, Man. ....	Week and Month	60	60	60	60	75	60	15- 18	60	15- 20	60	15- 20	53	17- 20	53
Saskatoon, Sask. ....	Week.	15.00	60	15.00	60	15.00 16.50	60	16.50- 18.00	60	16.50- 18.00	60	18.00	60	18.00	60
Lethbridge, Alta. ....	Month	85	10	85	9	90	9	90	9	90	9	90	9	90	9
Fernie, B.C. ....	Month	.....	.....	.....	.....	80	.....	80	.....	80	.....	85	.....	85	.....

## KETTLEMEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Guelph, Ont. ....	Week.	10	60	10	60	10	60	10	60	10	60	10	60	10	60
Sudbury, Ont. ....	Week.	7.00	54	7.00	54	7.00	54	7.00	54	7.00	54	8.00	54	8.00	54
St. Catharines, Ont.	Week.														
Winnipeg, Man.*...	Month and week											45	60	45	60
Saskatoon, Sask. ....	Week.														
Lethbridge, Alta. ....	Day..	3.25	9	3.25	9	3.25	9	3.25	9	3.25	9	3.50	9	3.50	9
Fernie, B.C. ....	Day..														

\*From 1905 to 1910 wages per month; from 1911 to 1913 wages per week.

## CELLARMEN.

Halifax, N.S. ....	Week.	8.00	60	8.00	60	8.00	60	8.00	60	8.00	60	9.00	60	9.00	60
St. John, N.B. ....	Week.	8.00	60	8.00	60	8.00	60	8.00	60	8.00	60	8.00	60	8.00	60
Guelph, Ont. ....	Week.	10	60	10	60	10	60	10	60	10	60	10	60	10	60
Sudbury, Ont. ....	Week.														
St. Catharines, Ont.	Week.	7.00	54	7.00	54	7.00	54	7.00	54	7.00	54	8.00	54	8.00	54
Winnipeg, Man. ....	Month and week..											40 45	60	40 50	60
Saskatoon, Sask. ....	Week.														
Lethbridge, Alta. ....	Day..	3.50	9	3.50	9	3.50	9	3.50	9	3.50	9	3.75	9	3.75	9
Fernie, B.C. ....	Day..														

## (b) Distilleries.

<b>MILLERS:—</b>															
Berthierville, Que.	Day..	1.00	60	1.00	60	1.00	60	1.00	60	1.10	60	1.10	60	1.10	60
Toronto, Ont. ....	Week.	9.00	55	10.00	55	10.00	55	11.00	55	11.00	55	12.00	55	12.00	55
<b>SPIRIT RUNNERS:—</b>															
Berthierville, Que.	Day..	1.20	70	1.20	70	1.20	70	1.20	70	1.20	70	1.20	70	1.20	70
Toronto, Ont. ....	Week.	9.00	45	9.00	45	9.00	45	10.00	45	10.00	45	11.00	45	12.00	45
<b>STILLMEN:—</b>															
Berthierville, Que.	Day..	1.35	65	1.35	65	1.35	65	1.35	65	1.35	65	1.35	65	1.35	65
Toronto, Ont. ....	Week.	9.00	50	9.00	50	9.00	50	10	50	10	50	11	50	11	50
<b>BOTTLERS (machine)</b>															
Berthierville, Que.	Day..	0.95	60	0.95	60	0.95	60	0.95	60	0.95	60	0.95	60	0.95	60
Toronto, Ont. ....	Week.	6.00	55	6.00	55	6.00	55	7.00	55	7.50	55	7.50	55	8.00	55
<b>WAREHOUSEMEN:—</b>															
Toronto, Ont. ....	Week.	10.00	55	10.00	55	10.00	55	11.00	55	11.00	55	12.00	55	12.00	55

## KETTLEMEN.—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
	Per	\$		\$		\$		\$		\$		\$		\$	
Guelph, Ont.....	Week.	10	60	10	60	10	60	12	60	12	60	12	60	12.00	60
Sudbury, Ont.....	Week.			13	60	13.50	60	13.50	60	14.50	60	15	60	15.00	60
St. Catharines, Ont.	Week.	8.00	54	8.00	54	9.00	54	9.50	54	9.50	54	11	54	11.00	54
Winnipeg, Man.*...	Month and week	45	60	45	60	45	60	50	60	16	60	18	53	20	53
Saskatoon, Sask....	Week.	18-19.50	60	18-20.50	60	18-20.50	60	19.50-20.50	60	20.50	60			22.50-25.00	60
Lethbridge, Alta....	Day..	3.50	9	3.50	9	3.75	8	3.75	8	3.75	8	3.75	8	3.75	8
Fernie, B.C.....	Day..					4.00	8	4.00	8	4.00	8	4.00	8	4.00	8

\*From 1905 to 1910 wages per month; from 1911 to 1913 wages per week.

## CELLARMEN.—Continued.

Halifax, N.S.....	Week.	9.00	60	9.00	60	10	60	10	60	10	60	10	60	10	60
St. John, N.B.....	Week.	8.00	60	8.00	60	8.55	60	9.00	55	9.00	55	9.00	55	10	55
Guelph, Ont.....	Week.	10	60	10	60	10	60	12	60	12	60	12	60	12	60
Sudbury, Ont.....	Week.			12	60	12	60	12	60	12	60	12	60	18	60
St. Catharines, Ont.	Week.	8.00	54	8.00	54	9.00	54	9.50	54	9.50	54	11	54	11	54
Winnipeg, Man.....	Month and week.	40-50	60	40-55	60	40-60	60	50-70	60	16-17	60	16-18	53	16-20	53
Saskatoon, Sask....	Week.	15-18	60	15-18	60	15-18	60	18-19.50	60	19.50-22.50	60	20.50	60	20.50-22.50	60
Lethbridge, Alta....	Day..	3.75	9	3.75	9	4.00	8	4.00	8	4.00	8	4.00	8	4.00	8
Fernie, B.C.....	Day..					4.00	8	4.00	8	4.00	8	4.00	8	4.00	8

## (b) Distilleries.

MILLERS:—															
Berthierville, Que.	Day..	1.15	60	1.15	60	1.15	60	1.15	60	1.25	60	1.25	60	1.50	60
Toronto, Ont.....	Week.	12.00	55	12.00	55	12.00	55	12.00	55	13.00	55	13.00	55	15.00	55
SPIRIT RUNNERS:—															
Berthierville, Que.	Day..	1.40	70	1.40	70	1.40	70	1.40	70	1.40	70	1.50	70	1.50	70
Toronto, Ont.....	Week.	12.00	45	12.00	45	12.00	45	12.00	45	12.00	45	12.00	45	14.00	45
STILLMEN:—															
Berthierville, Que.	Day..	1.40	65	1.40	65	1.40	65	1.40	65	1.40	65	1.50	65	1.50	65
Toronto, Ont.....	Week.	12.00	50	12.00	50	12.00	50	12.00	50	12.00	50	12.00	50	14.00	50
BOTTLEERS (machine)															
Berthierville, Que.	Day..	1.00	60	1.00	60	1.00	60	1.00	60	1.00	60	1.00	60	1.00	60
Toronto, Ont.....	Week.	8.50	55	9.00	55	10.00	55	10.00	55	10.50	55	10.50	55	11.00	55
WAREHOUSEMEN:—															
Toronto, Ont.....	Week.	12.00	55	12.00	55	12.00	55	12.00	55	13.00	55	13.00	55	14.00	55

**XIII.—TRANSPORTATION.****(a) Steam Railway Service.****\*CONDUCTORS (passenger.)**

LOCALITY	Unit.	1900	1901	1902	1903	1904	1905	1906
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
	Per	\$	\$	\$	\$	\$	\$	\$
Toronto-Sarnia.....	Month..	95	95	95	100	100	100	100
Montreal to Toronto.....	Month..	100	100	100	105	105	110	110
Toronto-North Bay-Midland.....	Month..	82	82	82	85	85	95	95

**\*BAGGAGEMEN (passenger.)**

Toronto-Sarnia.....	Month..	60	60	60	65	65	65	65
Montreal to Toronto.....	Month..	65	65	65	68	68	70	70
Toronto-North Bay-Midland.....	Month..	59	59	59	60	60	65	65

**\*BRAKEMEN (passenger.)**

Toronto-Sarnia.....	Month..	50	50	50	52	52	54	54
Montreal-Toronto.....	Month..	55	55	55	57	57	60	60
Toronto-North Bay-Midland.....	Month..	56	56	56	56	56	58	58

\*Trainmen up to 1912 employed on monthly basis; after that date on mileage basis. To make 1912-1913 rates comparable with earlier years the new mileage rate was multiplied by the average mileage per man per month.

**ENGINEERS (passenger.)**

Toronto-Sarnia.....	100 miles	*2.80	*2.80	*2.85	*2.85	*2.85	*2.85	*3.00
Montreal-Toronto.....	100 miles	*2.80	*2.80	*2.85	*2.85	*2.85	*2.85	*3.00
Toronto-North Bay-Midland.....	100 miles	*2.70	*2.70	*2.80	*2.80	*2.80	*2.80	*3.00

\*All classes of engines.

**FIREMEN (passenger.)**

Toronto-Sarnia.....	100 miles	*1.60	*1.60	*1.62	*1.62	*1.62	*1.62	*1.73
Montreal-Toronto.....	100 miles	*1.60	*1.60	*1.62	*1.62	*1.62	*1.62	*1.73
Toronto-North Bay-Midland.....	100 miles	*1.54	*1.54	*1.60	*1.60	*1.60	*1.60	*1.73

\*All classes of engines.

## XIII.—TRANSPORTATION.

## (a) Steam Railway Service.

\*CONDUCTORS (passenger.)—Continued.

LOCALITY.	Unit.	1907	1908	1909	1910	1911	1912	1913
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
	Per	\$	\$	\$	\$	\$	\$	\$
Toronto-Sarnia.....	Month.	100	100	100	130	140	138.43	138.43
Montreal to Toronto.....	Month..	110	110	110	140	140	155.57	155.57
Toronto-North Bay-Midland.....	Month.	95	95	95	110	110	130.13	130.13

\*BAGGAGEMEN (passenger.)—Continued.

Toronto-Sarnia.....	Month..	65	65	65	75	75	80	80
Montreal to Toronto.....	Month..	70	70	70	85	85	89.98	89.98
Toronto-North Bay-Midland.....	Month..	65	65	65	75	75	75.26	75.26

\*BRAKEMEN (passenger.)—Continued.

Toronto-Sarnia.....	Month..	54	54	54	70	70	77.43	77.43
Montreal-Toronto.....	Month..	60	60	60	80	80	87.08	87.08
Toronto-North Bay-Midland.....	Month..	58	58	58	65	65	72.83	72.83

\*Trainmen up to 1912 employed on monthly basis; after that date on mileage basis. To make 1912-1913 rates comparable with earlier years the new mileage rate was multiplied by the average mileage per man per month.

ENGINEERS (passenger.)—Continued.

Toronto-Sarnia.....	100 miles	*3.25	*3.25	*3.25	†3.55	†3.55	†3.75	†3.75
Montreal-Toronto.....	100 miles	*3.25	*3.25	*3.25	†3.55	†3.55	†3.75	†3.75
Toronto-North Bay-Midland.....	100 miles	*3.25	*3.25	*3.25	†3.55	†3.55	†3.75	†3.75

\*All classes of engines.

†18 inch cylinder and under.

FIREMEN (passenger.)—Continued.

Toronto-Sarnia.....	100 miles	*1.85	*1.85	*1.85	†2.00	†2.00	†2.15	†2.15
Montreal-Toronto.....	100 miles	*1.85	*1.85	†1.85	†2.00	†2.00	†2.15	2.15
Toronto-North Bay-Midland.....	100 miles	*1.85	*1.85	*1.85	†2.00	†2.00	†2.15	†2.15

\*All classes of engines.

†18 inch cylinder and under.



## YARD HELPERS.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
	Per	\$	\$	\$	\$	\$	\$	\$
Toronto.....	Day....	1.60	1.60	1.70	1.90	1.90	2.00	2.10
Montreal.....	Day....	1.65	1.65	1.75	1.85	2.00	2.00	2.10
London.....	Day....	1.70	1.70	1.70	1.90	1.90	2.00	2.10
Allandale.....	Day....	1.60	1.70	1.70	1.80	2.00	2.00	2.00

## MAINTENANCE-OF-WAY EMPLOYEES (other than in yards).

St. John-McAdam.....	Day....			1.30	1.35	1.35	1.35	1.40
Montreal-Toronto.....	Day....	1.10	1.10	1.20	1.30	1.30	1.30	1.30
Toronto-Sarnia.....	Day....	1.10	1.10	1.20	1.30	1.30	1.30	1.30
Toronto-North Bay-Midland.....	Day....	1.10	1.10	1.20	1.30	1.30	1.30	1.30
Cartier-Winnipeg.....	Day....			1.40	1.45	1.45	1.45	1.50
Broadview-Calgary.....	Day....			1.40	1.45	1.45	1.45	1.50
Kamloops-Vancouver.....	Day....	1.25	1.35	1.35	1.45	1.45	1.45	1.50

## FREIGHT CARPENTERS.

		c.	c.	c.	c.	c.	c.	c.
London.....	Hour....					.18	.18	.18
Montreal.....	Hour....					.18½	.18½	.18½
Winnipeg.....	Hour....	.20-	.21-	.22½-	.22½-	.22½-	.22½-	.22½-
		.22	.23	.24½	.24½	.24½	.25½	.25½
Vancouver.....	Hour....	.22-	.22-	.22-	.26	.26	.26½-	.26½-
		.24	.24	.24			.27½	.27½

## MACHINISTS.

St. John.....	Hour....				.23			26-27
Toronto.....	Hour....		.25	.27½	.27½	.27	.30	.29
Montreal.....	Hour....		.25	.27½	.27½	.27½	.30	.29
Winnipeg.....	Hour....	25-27	.27	.27	.32½	.34	.34	.37½
Vancouver.....	Hour....	28-30	.30	.30	.34½	.35	.35	.38½

## YARD HELPERS.—Continued.

LOCALITY.	Unit.	1907	1908	1909	1910	1911	1912	1913
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
	Per	\$	\$	\$	\$	\$	\$	\$
Toronto.....	Day....	2.40	2.40	2.40	3.00	3.00	3.40	3.40
Montreal.....	Day....	2.40	2.40	2.40	3.00	3.00	3.40	3.40
London.....	Day....	2.40	2.40	2.40	3.00	3.00	3.40	3.40
Windsor.....	Day....	2.25	2.25	2.25	2.90	2.90	3.30	3.30

## MAINTENANCE-OF-WAY EMPLOYEES (other than in yards).—Continued.

St. John-McAdam.....	Day....	1.55	1.55	1.55	1.55	1.70	1.70	1.70
Montreal-Toronto.....	Day....	1.40	1.40	1.40	1.40	1.50	1.50	1.50
Toronto-Sarnia.....	Day....	1.40	1.40	1.40	1.40	1.50	1.50	1.50
Toronto-North Bay-Midland.....	Day....	1.40	1.40	1.40	1.40	1.50	1.50	1.50
St. Catharines-Winnipeg.....	Day....	1.70	1.70	1.70	1.70	1.90	1.90	1.90
St. John-Edmonton.....	Day....	1.70	1.70	1.70	1.70	2.00	2.00	2.00
St. John-Vancouver.....	Day....	1.70	1.70	1.70	1.70	2.00	2.00	2.00

## FREIGHT CARPENTERS.—Continued.

		c.	c.	c.	c.	c.	c.	c.
London.....	Hour....	.19	.20	.20	.20	.20	.22	.22
Montreal.....	Hour....	.20½	.20½	.20½	.20½	.20½	.22	.22
Winnipeg.....	Hour....	.28½	.28½	.28½	.28½	.31½	.31½	.31½
Vancouver.....	Hour....	.29½— .30½	.29½— .30½	.29½— .30½	.29½— .30½	.32½	.32½	.32½

## MACHINISTS.—Continued.

St. John.....	Hour....	26-30	.30	.30	.30	.33	.33	.35
Toronto.....	Hour....	.29	.30	.30	.30	.30	.32	.32
Montreal.....	Hour....	.30	.30	.30	.30	.30	.30	.30
Winnipeg.....	Hour....	.42½	.42½	.42½	.42½	.45½	.45½	.45½
Vancouver.....	Hour....	.43½	.43½	.43½	.43½	.46½	.46½	.46½

## TELEGRAPHERS.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
	Per	\$	\$	\$	\$	\$	\$	\$
Atlantic Division.....	Month.....			45	45	45	45	45
Ontario Division.....	Month.....	38	38	40	40	40	42.50	42.50
Manitoba Division.....	Month.....			55	55	55	55	55
British Columbia Division.....	Month.....			60	60	60	60	60

## (b) Street and Electric Railway Employees.

## MOTORMEN AND CONDUCTORS.

LOCALITY.	Unit.*	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hr.
		c.		c.		c.		c.		c.		c.		c.	
Halifax, N.S....	1 Hour..	.12½	10	.12½	10	.13½	10	.13½	10	.14½	10	.14½	10	.15½	10
	2	.13		.13		.14		.14		.15		.15		.16	
	3	.14		.14		.15		.15		.16		.16		.17	
	4	.15		.15		.16		.16		.17		.17		.18	
	5	.16		.16		.17		.17							
Quebec, Que....	1 Hour..	.12½	10	.12½	10	.12½	10	.12½	10	.12½	10	.12½	10	.13	10
	2	.13		.13½		.13½		.13½		.13½		.13½		.14½	
	3	.15		.16		.16		.16		.16		.16		.16½	
	4														
	5														
Montreal, Que..	1 Hour..														
	2														
	3														
	4														
	5														
Ottawa, Ont....	1 Hour..	.14	10	.14	10	.14	10	.15½	10	.15½	10	.15½	10	.16½	10
	2	.15		.15		.15		.16½		.16½		.16½		.17½	
	3	.15		.15		.15		.16½		.16½		.17½		.18½	
Toronto, Ont....	1 Hour..	\$40.	9½	\$40.	9½	\$40.	9½	.16½	9½	.16½	9½	.16½	9½	.16½	9½
(Suburban	2 and														
Railway)	3 Month														
Niagara, St.	4														
Catharines,	5														
Toronto.															
Winnipeg, Man	1 Hour..	.17	9	.17	9	.18	9	.18	9	.20	9	.20	9	.21	9
	2	.17		.17		.19		.19		.21		.21		.22	
	3	.19		.19		.20		.20		.21		.24		.26	
	4	.19		.19		.21		.21		.24		.24		.26	
	5	.19		.19		.21		.21		.24		.24		.26	
Regina, Sask...	1 Hour..														
	2														
	3														
Edmonton, Alta	1 Hour..														
	2														
	3														
	4														
Vancouver,	1 Hour..	.20	9	.20	10	.20	10	.20	9	.20	9	.20	9	.20	9
Victoria,	2	.20		.20		.20		.20		.20		.21		.21	
and New West	3	.21		.21		.22		.22		.22		.22		.22	
minster, B.C.	4	.22		.22		.22		.22		.22		.23		.23	
	5					.23		.23		.23		.24		.24	

\*The figures hereunder indicate the year of service.

## TELEGRAPHERS.—Continued.

LOCALITY	Unit.	1907	1908	1909	1910	1911	1912	1913
		Wages	Wages	Wages	Wages	Wages	Wages	Wages
		\$	\$	\$	\$	\$	\$	\$
Atlantic Division.....	Month..	51.30	51.30	51.30	53.00	53.00	60.00	60.00
Ontario Division.....	Month..	42.50	46.75	46.75	50.00	50.00	50.00	50.00
Manitoba Division.....	Month..	62.70	62.70	62.70	65.00	65.00	73.00	73.00
British Columbia Division.....	Month..	68.00	68.00	68.00	68.00	68.00	78.00	78.00

## (b) Street and Electric Railway Employees.

## MOTORMEN AND CONDUCTORS.—Continued.

LOCALITY.	Unit.*	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
Halifax, N.S....	1 { Hour..	c.		c.		c.		c.		c.		c.		c.	
	2 {	.15½	10	.16½	10	.16½	10	.17½	10	.17½	10	.18½	10	.20½	10
	3 {	.16		.17		.17		.18		.18		.19		.21½	
	4 {	.17		.18		.18		.19		.19		.20		.23½	
	5 {	.18		.19		.19		.20		.20		.21			
Quebec, Que....	1 { Hour..	.14½	10	.16	10	.16	10	.16	10	.16	10	.16	10	.17½	10
	2 {	.16		.17		.17		.17		.17		.17		.18½	
	3 {	.18		.19		.19		.19		.19		.19		.20½	
	4 {													.21½	
Montreal, Que..	1 { Hour..					.20	10	.20	10	.20	10	.20	10	.24	10
	2 {					.20		.20		.20		.21		.24	
	3 {					.20		.20		.20		.22		.24	
	4 {					.20		.20		.20		.22		.24	
	5 {					.20		.20		.20		.22		.24	
Ottawa, Ont....	1 { Hour..	.17½	10	.18½	10	.18½	10	.19	10	.19	10	.20	10	.21½	10
	2 {	.18½		.19½		.19½		.20		.20		.21		.22½	
	3 {	.19½		.20½		.20½		.22		.22		.23		.25	
Toronto, Ont... (Suburban Railway)	1 { Hour..	.15	9½	.15	9½	.15	9½	.15	9½	.18	9½	.18	9½	.25	9½
	2 { and	.15		.15		.15		.15		.20		.20		.26	
	3 { Month	.15		.15		.15		.15		.20		.20		.27	
	4 {	.18		.18		.18		.18		.22		.22		.28	
	5 {	.20		.20		.20		.20		.22		.24			
Niagara, St. Catharines, Toronto.	1 { Hour..	.21		.21		.21		.21		.23		.24			
	2 {	.22	9	.22	9	.22	9	.23	9	.25	9	.26	9	.25	9
	3 {	.23		.23		.23		.24		.26		.27		.27	
	4 {	.26		.26		.26		.26½		.28½		.29½		.28	
	5 {	.26		.26		.26		.27		.29		.32		.31	
Regina, Sask...	1 { Hour..									.25		.25		.27½	
	2 {									.27½	9	.28	9	.30	9
	3 {									.30		.30		.35	
Edmonton, Alta	1 { Hour..			.21	9	.21	9	.25	9	.25	9½	.25	9½	.27½	9½
	2 {			.23	to	.23	to	.27½	to	.27½		.27½		.30	
	3 {			.25	10	.25	10	.30	10	.30		.30		.35	
	4 {													.37½	
Vancouver, Victoria, and New West minster, B.C.	1 { Hour..	.20	9	.23	9	.23	9	.23	9	.25	9	.27	9	.27	9
	2 {	.21		.25½		.25½		.25		.27		.29		.29	
	3 {	.22		.26½		.26½		.26½		.29		.31		.31	
	4 {	.23		.27½		.27½		.27½		.31		.33		.33	
	5 {	.24		.28½		.28½		.28½		.33		.35		.35	

\*The figures hereunder indicate the year of service.

LINEMEN.

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
Halifax, N.S.....	Hour and Day	\$ 1.50 2.50	10	\$ 1.50 2.50	10	\$ 1.50 2.50	10	\$ 1.50 2.50	10	\$ .16½ .20	10	\$ .17½ .20	10	\$ .17½ .21	10
Quebec, Que.....	Hour..	.13	10	.13	10	.14	10	.14	10	.14½	10	.14½	10	.14½	10
Montreal, Que.....	Hour..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Ottawa, Ont.....	Hour..	.16	10	.16	10	.16	10	.16 .17	10	.15½ .17	10	.15½ .17½	10	.17½	10
Niagara, St. Catharines, Toronto, Ont	Hour..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.15	10	.15 .17½	10
Winnipeg, Man.....	Hour..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Regina, Sask.....	Hour..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Edmonton, Alta....	Hour..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Vancouver, Victoria, New Westminster.	Hour..	.20	9	.25	9	.25	9	.27½	8	.37½	8	.37½	8	.37½	8

**(c) Longshoremen.**

## CHECKERS..

[illegible]





## GRAIN TRIMMERS.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906	
		\$	\$	\$	\$	\$	\$	\$	
Halifax, N.S.	Hour.	0 20	0 20	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	Wages for day labour " " night "
Charlottetown, P.E.I.	Day..	1 50	1 50	1 50	1 50	1 50	1 50	1 50	
St. John, N.B.	Hour..	0 35	0 35	0 35	0 40	0 40	0 40	30-40	
Quebec, Que.	Hour..	0 37½	0 37½	0 37½	0 37½	0 37½	0 37½	0 37½	
Collingwood, Ont.	Hour..	0 30	0 30	0 30	0 30	0 30	0 30	0 30	Wages for day labour " " night "
Owen Sound, Ont.	Hour..	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	

## COAL SHOVELLERS.

Halifax, N.S.	Hour.	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	0 20- 0 25	Wages for day labour " " night "
Charlottetown, P.E.I.	Day..	2 50	2 50	2 50	2 50	2 50	2 50	2 50	
St. John, N.B.	Hour..	0 35	0 35	0 35	0 35	0 35	0 35	0 35	
Quebec, Que.	Hour..	0 37½	0 37½	0 37½	0 37½	0 37½	0 37½	0 37½	
Three Rivers, Que.	Hour..	0 20	0 20	0 20	0 20	0 20	0 20	0 25	
Hamilton, Ont.	Hour..	0 22½ 0 25	0 22½ 0 25	0 22½ 0 25	0 22½ 0 25	0 22½ 0 25	0 22½ 0 25	0 30	Wages for day labour " " night "
Owen Sound, Ontario.	Hour..	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	0 21 0 22	
Vancouver, B.C.	Hour..	0 40 0 50	0 40 0 50	0 40 0 50	0 40 0 50	0 40 0 50	0 40 0 50	0 40 0 50	Wages for day labour. " " night "

## GENERAL LABOUR.

Halifax, N.S.	Day..	1 25	1 35	1 35	1 35	1 35	1 35	1 35- 1 50
Charlottetown, P.E.I.	Day..	1 50	1 50	1 50	1 50	1 50	1 50	1 50
St. John, N.B.	Day..	1 75	1 75	1 75	1 75	1 75	1 75	1 80
Three Rivers, Que.	Hour..	0 15	0 15	0 15	0 15	0 15	0 15	0 15
Hamilton, Ont.	Hour..	0 14	0 14	0 14	0 14	0 14	0 18	0 18
Collingwood, Ont.	Hour..	0 25	0 25	0 25	0 25	0 25	0 25	0 25
Owen Sound, Ont.	Hour..				0 15	0 15	0 15	0 15

## GRAIN TRIMMERS.—Continued.

LOCALITY.	Unit.	1907	1908	1909	1910	1911	1912	1913	
		\$	\$	\$	\$	\$	\$	\$	
Halifax, N.S.	Hour..	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.28 0.35	Wages for day labour. " " night "
Charlottetown, P.E.I.	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
St. John, N.B.	Hour..	0.42½	0.42½	0.42½	0.42½	0.42½	0.42½	0.42½	
Quebec, Que.	Hour..	0.37½	0.37½	0.37½	0.37½	0.37½	0.37½	0.37½	
Collingwood, Ont.	Hour..	0.30	0.30	0.30	0.30	0.30	0.30	0.30	
Owen Sound, Ont.	Hour..	0.21- 0.22	0.23- 0.23	0.23- 0.23	0.23- 0.23	0.23- 0.23	0.23- 0.23	0.23- 0.23	Wages for day labour. " " night "

## COAL SHOVELLERS.—Continued.

Halifax, N.S.	Hour..	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.25- 0.30	0.28- 0.35	Wages for day labour. " " night "
Charlottetown, P.E.I.	Day..	2.50	2.50	2.50	2.50	2.50	2.50	3.50	
St. John, N.B.	Hour..	0.35	0.35	0.35	0.35	0.35	40-45		
Quebec, Que.	Hour..	0.37½	1.37½	0.37½	0.37½	0.37½	0.37½	0.37½	
Three Rivers, Que.	Hour..	0.25	0.25	0.25	0.25	0.25	0.30	0.30	
Hamilton, Ont.	Hour..	0.30	0.30	0.30	0.30	0.30	0.30	0.30	Wages for day labour.
Owen Sound, Ontario.	Hour..	0.21 0.22	0.25	0.25	0.25	0.25	0.25	0.25	Wages for day labour. " " night "
Vancouver, B.C.	Hour..	0.40 0.50	0.40 0.50	0.40 0.50	0.40 0.50	0.40 0.50	0.40 0.50	0.40 0.50	Wages for day labour. " " night "

## GENERAL LABOUR.—Continued.

Halifax, N.S.	Day..	1.35- 1.50	1.35- 1.50	1.35- 1.80	1.35- 1.80	1.35- 1.80	1.35- 1.80	1.35- 1.80	
Charlottetown, P.E.I.	Day..	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
St. John, N.B.	Day..	1.80	1.80	1.80	1.80	1.80	1.80	2.00	
Three Rivers, Que.	Hour..	0.20	0.20	0.20	0.25	0.25	0.30	0.30	
Hamilton, Ont.	Hour..	0.18	0.18	0.18	0.18	0.18	0.22	0.22	
Collingwood, Ont.	Hour..	0.25	0.25	0.25	0.25	0.25	0.25	0.25	
Owen Sound, Ont.	Hour..	0.16	0.16	0.17	0.17	0.17	0.25	0.25	

## XIV.—MUNICIPAL EMPLOYEES.

## (a) Police Department.

## CONSTABLES, PATROLMEN OR PRIVATES.

LOCALITY.	Unit.*	1900	1901	1902	1903	1904	1905	1906
		\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.	1 { 2 Year.. 3 {	400 500	400 550	400 550	400 550	400 550	400 550	400 550
Charlottetown, P.E.I.	Year..	450	450	450	450	450	450	450
St. John, N.B.	1 { 2 Day.. 3 {	1.60	1.60	1.60	1.60	1.75	1.75	1.75
Montreal, Que.	3 { 2 Week.. 1 {	11.20 10.15 9.10	11.20 10.15 9.10	11.20 10.15 9.20	12.20 11.20 10.20	12.50 11.50 10.50	12.50 11.50 10.50	12.50 11.50 10.50
London, Ont.	3 { 2 Day.. 1 {	1.90 1.55 1.40	1.90 1.55 1.40	1.90 1.55 1.40	2.10 1.75 1.50	2.10 1.75 1.50	2.10 1.75 1.50	2.10 1.75 1.50
Ottawa, Ont.	7 { 6 { 5 { 4 Month.. 3 { 2 { 1 {	60 55 50 45 40 35	60 55 50 45 40 35	60 55 50 45 40 35	62.50 57.50 52.50 47.50 45 40 35	62.50 57.50 52.50 47.50 45 40 35	62.50 57.50 52.50 47.50 45 40 35	62.50 57.50 52.50 47.50 45 40 35
Toronto, Ont.	3 { 2 Year.. 1 {	730 638.75 547.50	730 638.75 547.50	730 638.75 547.50	781.10 682.55 584.	781.10 682.55 584.	821.25 730 638.75	900 800 700
Winnipeg, Man.	4 { 3 Month.. 2 { 1 {	65 60 55 50	65 60 55 50	70 60 50 50	70 65 60 50	77 71 66 55	77 71 66 55	77 71 66 55
Moose Jaw, Sask.	1.. Month	75	75	75	75	75	75	75
Edmonton, Alta.	1 { 2 Month.. 3 { 4 {	50	60	60	75	60	60 65 70 75	60 65 70 75
Vancouver, B.C.	1 { 2 Month.. 3 { 4 {	65 75	65 75	65 75	65 75	65 75	65 75	70 80

\*The figures hereunder indicate the year of service.

## XIV.—MUNICIPAL EMPLOYEES.

## (a) Police Department.

CONSTABLES, PATROLMEN OR PRIVATES.—*Continued.*

LOCALITY.	Unit.*	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.	1 { 2 Year.. 3 {	400 600	500 600 650	500 600 650	500 600 650	500 600 650	500 600 650	535 635 685
Charlottetown, P.E.I.	Year..	450	450	450	450	450	450	500
St. John, N.B.	1 { 2 Day.. 3 {	2.00	2.00	2.00	2.00	2.00	1.75 2.00 2.25	1.75 2.00 2.25
Montreal, Que.	1 { 2 Year.. 3 {	700 650 600	750 650 600	750 650 600	750 650 600	775 650 600	900 800 700	950 850 750
London, Ont.	3 { 2 Day.. 1 {	2.10 1.75 1.51	2.45 2.09 1.92	2.45 2.09 1.92	2.45 2.09 1.92	2.61 2.29 2.13	2.61 2.29 2.13	2.74 2.47 2.19
Ottawa, Ont.	7 { 6 { 5 { 4 Month 3 { 2 { 1 {	70 65 60 57.50 55 52.50 50	70 65 60 57.50 55 52.50 50	75 65 60 57.50 55 52.50 50	75 65 60 57.50 55 52.50 50	82.50 77.50 72.50 65 62.50 60 57.50	82.50 77.50 72.50 65 62.50 60 57.50	82.50 77.50 72.50 85 62.50 60 57.50
Toronto, Ont.	3 { 2 Year.. 1 {	900 800 700	900 800 700	900 800 700	900 800 700	1,000 875 775	1,000 875 775	1,050 900 800
Winnipeg, Man.	4 { 3 Month 2 { 1 {	80 70 60	80 70 60	80 70 60	92 80 69	92 80 69	100 95 85 75	100 95 85 75
Moose Jaw, Sask.	Month	75	75	75	75	75	75	80
Edmonton, Alta.	1 { 2 Month 3 { 4 {	60 65 70 75	65 70 75 80	65 70 75 80	65 70 75 80	65 70 75 80	75 80 85 90	75 80 85 90
Vancouver, B.C.	1 { 2 Month 3 { 4 {	70 80	70 75 90	70 75 90	75 80 90 100	75 80 90 100	80 85 95 105	80 85 95 105

\*The figures hereunder indicate the year of service.

(b) Fire Department Employees.

FIREMEN.

LOCALITY.	Unit.	1900	1901	1902	1903	1904	1905	1906
		\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.;	1 {	521	521	521	521	521	547	547
	2 { Year..	468	468	468	468	468	494	494
	3 {	416	416	416	416	416	442	442
Quebec, Que.	Year.....	425	500	500	500	500	500	500
Ottawa, Ont.	1 {	420	420	420	450	450	450	450
	2 {	480	480	480	500	500	500	500
	3 { Year..	510	510	510	550	550	550	550
	4 {	540	540	540	600	600	600	600
	5 {				650	650	650	650
Toronto, Ont.	1 {	400	400	400	450	450	450	450
	2 {	500	500	500	550	550	550	550
	3 { Year..	550	550	550	625	625	650	650
	4 {	600	600	600	700	700	750	750
	5 {	650	650	650	750	750	850	850
Winnipeg, Man.	1 {	45	45	50	55	65	55	60
	2 {	48	48	53	60	60	60	65
	3 { Month	51	51	56	65	65	65	70
	4 {	54	54	59	70	70	70	75
	5 {	57	57	62				
	6 {	60	60	65				
Moose Jaw, Sask.	1 { Month							
	2 {							
Edmonton, Alta.	1 {							60
	2 { Month							
	3 {							
Victoria, B.C.	{ "							

## (b) Fire Department Employees.

FIREMEN.—Continued.

LOCALITY.	Unit.	1907	1908	1909	1910	1911	1912	1913
		\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.	1 { 2 { 3 {	573 520 468	599 546 494	599 546 494	599 546 494	625 572 520	650 597 546	650 597 546
Quebec, Que.	Year	500	600	600	600	600	600 650	600 650
Ottawa, Ont.	1 { 2 { 3 { 4 { 5 {	525 600 625 625 700	525 600 625 625 700	525 600 625 625 700	525 600 625 625 700	600 650 700 750 750	600 650 700 750 750	600 680 730 780 830
Toronto, Ont.	1 { 2 { 3 { 4 { 5 {	450 550 650 750 850	500 600 700 800 900	500 600 700 800 900	500 600 700 800 900	600 700 800 900 1,000	600 700 800 900 1,000	700 800 900 1,000 1,100
Winnipeg, Man.	1 { 2 { 3 { 4 { 5 { 6 {	60 65 70 75	60 65 70 75	70 75 80 85	70 75 80 85	70 75 80 85 97.75	70 75 80 85 97.75	70 80 90 100 110
Moose Jaw, Sask.	1 { 2 {	Month	Month	Month	50 65	55 70	65 80	65 80
Edmonton, Alta.	1 { 2 { 3 {	Month	Month	Month	60 65 70	65 75 80	75 85 90	75-80 85 90
Victoria, B.C.	1 { 2 { 3 { 4 { 5 {	"	"	"	660 720 780 840 900	780 840 900 960 1,020	840 900 960 1,020 1,080	900 960 1,020 1,080



## (c) General.

## UNSKILLED LABOUR

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Halifax, N.S. ....	Hour.	0.10- 0.18	54	0.10- 0.18	54	0.10- 0.18	54	0.13- 0.16½	54	0.13- 0.16½	54	0.13- 0.16½	54	0.13- 0.16½	54
Charlottetown, P.E.I.	Day ..	1.00	60	1.00	60	1.00	60	1.25	60	1.25	60	1.25	60	1.25	60
Fredericton, N.B. ....	Day ..	1.00- 1.25	60	1.00- 1.25	60	1.00- 1.25	60	1.00- 1.25	60	1.25 1.60	54	1.25- 1.60	54	1.25- 1.60	54
Montreal, Que. ....	Hour.	0.20	60	0.20	60	0.20	60	0.20	60	0.20	60	0.20	60	0.20	60
Ottawa, Ont. ....	Day ..	1.40	60	1.40	60	1.50	60	1.50	60	1.65	60	1.65	54	1.65	54
Toronto, Ont. ....	Hour.	0.18	54	0.18	54	0.18	54	0.20	54	0.20	54	0.20	54	0.22½	54
Winnipeg, Man. ....	Day ..	1.25		1.25											
		1.50		1.50		1.50		1.50		1.50		1.50		1.50	
		1.60		1.60		1.75		1.75		1.75		1.75		1.75	
		1.75	54	1.75	54	2.00	54	2.00	54	2.00	54	2.00	54	2.00	54
Moose Jaw, Sask. ....	Day ..	2.00	60	2.00	60	2.00	60	2.00	60	2.00	60	2.00	60	2.00	60
Edmonton, Alta. ....	Hour.	0.15	60	0.15	60	0.15	60	0.15	60	0.15	60	0.20	60	0.20	60
Victoria, B.C. ....	Day ..	2.00	48	2.00	48	2.00	48	2.00	48	2.25	48	2.25	48	2.50	48

## STREET FOREMEN.

Halifax, N.S. ....	Hour.	0.20- 0.30	54	0.20- 0.30	54	0.20- 0.30	54	0.20- 0.28	54	0.20- 0.28	54	0.20- 0.28	54	0.20- 0.28	54
Charlottetown, PEI. ....	Day ..								1.40	60	1.40	60	1.40	60	
Fredericton, N.B. ....	Year ..	500.00	60	500.00	60	5.0000	60	500.00	60	600.00	54	600.00	54	600.00	54
Montreal, Que. ....	Hour.	0.25- 0.30	60	0.25- 0.30	60	0.25- 0.30	60	0.25- 0.30	60	0.25- 0.30	60	0.25- 0.30	60	0.25- 0.30	60
Ottawa, Ont. ....	Day ..										1.92½	54	2.00	54	
Toronto, Ont. ....	Day ..	2.50- 3.50	54	2.50- 3.50	54	2.50- 3.50	54	2.70- 3.50	54	2.70- 4.00	54	2.75- 4.00	54	3.00- 4.00	54
Winnipeg, Man. ....	Day ..	2.75- 3.00	54	2.75- 3.00	54	3.00-	54	3.00-	54	3.00-	54	3.00-	54	3.00	54
Edmonton, Alta. ....	Day ..	2.00	60	2.00	60	2.00	60	2.00	60	2.00	60	2.50	54	2.50	54
Victoria, B.C. ....	Day ..	2.00	48	2.00	48	2.00	48	2.00	48	2.25	48	2.25	48	2.50	48

## (c) General.

## UNSKILLED LABOUR—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Halifax, N.S.....	Hour..	0.18— 0.22	54	0.18— 0.22	54	0.18— 0.22	54	0.18— 0.22	54	0.18— 0.22	54	0.18— 0.22	54	0.18— 0.22	54
Charlottetown, P.E.I.	Day..	1.25	60	1.25	60	1.25	60	1.25	60	1.25	60	1.25	60	1.40	60
Fredericton, N.B....	Day..	1.25— 1.60	54	1.25— 1.60	54	1.25— 1.60	54	1.25— 1.60	54	1.25— 1.60	54	1.25— 1.60	54	1.60— 2.00	54
Montreal, Que.....	Hour..	0.20	60	0.20	60	0.20	60	0.20	60	0.20	60	0.21	60	0.22½	60
Ottawa, Ont.....	Day..	1.75	54	1.75	54	1.75	54	1.80	54	1.98	54	1.98	54	2.25	54
Toronto, Ont.....	Hour..	0.22½	54	0.22½	54	0.22½	54	0.22½	54	0.22½	54	0.25	54	0.25	54
Winnipeg, Man.....	Day..	1.57½ 2.02½	54	1.57½ 2.02½	54	1.57½ 2.02½	54	1.80 2.25	54	1.80 2.25	54	2.02½ 2.25	54	2.02½ 2.47½	54
Moose Jaw, Sask....	Day..	2.00	60	2.00	60	2.00	60	2.25	60	2.75	60	2.50 2.75	60	2.50 3.00	60
Edmonton, Alta....	Hour..	0.20	60	0.25	60	0.25	54	0.25	54	0.25	54	0.30	48	0.30	54
Victoria, B.C.....	Day..	2.75	48	2.75	48	2.75	48	2.75	48	3.00	48	3.00	48	3.00	54

## STREET FOREMEN.—Continued.

Halifax, N.S.....	Hour..	0.22½ 0.36	54	0.22½ 0.36	54	0.22½ 0.36	54	0.22½ 0.36	54	0.22½ 0.36	54	0.22½ 0.36	54	0.22½ 0.36	54
Charlottetown, PEI..	Day..	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60	1.40	60	1.85	60
Fredericton, N.B....	Year..	600.00	54	600.00	54	600.00	54	600.00	54	600.00	54	600.00	54	800.00	54
Montreal, Que.....	Hour..	0.25— 0.30	60	0.25— 0.30	60	0.25— 0.30	60	0.25— 0.35	60	0.25— 0.40	60	0.25— 0.40	60	0.27— 0.42	60
Ottawa, Ont.....	Day..	2.00	54	2.00	54	2.00	54	2.25	54	2.50	54	2.50	54	2.75	54
Toronto, Ont.....	Day..	3.00— 4.00	54	3.00— 4.00	54	3.00— 4.00	54	3.00— 4.25	54	3.00— 4.25	54	3.00— 4.25	54	3.00— 4.25	54
Winnipeg, Man.....	Day..	3.00— 3.50	54	3.00— 3.50	54	3.00— 4.00	54	3.50— 4.00	54	4.00— 5.00	54	4.00— 5.00	54	4.00— 5.00	54
Edmonton, Alta....	Day..	2.50	54	2.50	54	2.50	54	2.50	54	3.00	54	3.25	48	3.50	54
Victoria, B.C.....	Day..	2.75	48	2.75	48	2.75	48	2.75	48	3.00	48	3.00	48	3.00	48

## TEAMSTERS (With 1 horse and cart.)

LOCALITY.	Unit.	1900		1901		1902		1903		1904		1905		1906	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Halifax, N.S. . . . .	Hour..	0.20	54	0.20	54	0.20	54	0.22½	54	0.22½	54	0.22½	54	0.22½	54
Charlottetown, P.E.I. .	Day..	2.25	60	2.25	60	2.50	60	2.50	60	2.50	60	2.50	60	2.50	60
Fredericton, N.B. . . .	Day..	2.00	60	2.00	60	2.00	60	2.00	60	2.00— 2.50	54	2.00— 2.50	54	2.00— 2.50	54
Montreal, Que. . . . .	Hour..	0.30	60	0.30	60	0.30	60	0.30	60	0.30	60	0.30	60	0.30	60
Ottawa, Ont. . . . .	Day..	1.75	60	1.75	60	1.75	60	1.75	60	1.75	60	2.00	54	2.25	54
Toronto, Ont. . . . .	Hour..	0.28	54	0.28	54	0.28	54	0.31	54	0.31	54	0.31	54	0.35	54
Winnipeg, Man. . . . .	Day..	2.50	60	2.50	60	3.00	60	3.00	60	3.00	60	3.00	60	3.00	60
Edmonton, Alta. . . . .	Hour..											0.27½	60	0.27½	60
Victoria, B.C. . . . .	Day..	3.50	48	3.50	48	3.50	48	3.50	48	4.00	48	4.00	48	4.00	48

## TEAMSTERS (With 1 horse and cart.)—Continued.

LOCALITY.	Unit.	1907		1908		1909		1910		1911		1912		1913	
		Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.	Wages	Hrs.
		\$		\$		\$		\$		\$		\$		\$	
Halifax, N.S. . . . .	Hour..	0.28	54	0.28	54	0.28	54	0.28	54	0.28	54	0.28	54	0.28	54
Charlottetown, P.E.I. .	Day..	2.50	60	2.50	60	2.50	60	2.50	60	2.50	60	2.50	60	2.50	60
Fredericton, N.B. . . .	Day..	2.00— 2.50	54	2.00— 2.50	54	2.00— 2.50	54	2.00— 2.50	54	2.00— 2.50	54	2.00— 2.50	54	2.50— 2.75	54
Montreal, Que. . . . .	Hour..	0.30	60	0.30	60	0.30	60	0.30	60	0.30	60	0.31½	60	0.35	60
Ottawa, Ont. . . . .	Day..	2.25	54	2.25	54	2.50	54	2.50	54	2.00	54	2.70	54	2.70	54
Toronto, Ont. . . . .	Hour..	0.35	54	0.35	54	0.35	54	0.35	54	0.35	54	0.35	54	0.40	54
Winnipeg, Man. . . . .	Day..	3.00	60	3.00	60	3.00	60	3.50	60	3.50	60	3.50	60	3.50	60
Edmonton, Alta. . . . .	Hour..	0.27½	60	0.27½	60	0.36	60	0.39	60	0.39	60	0.49	54		
Victoria, B.C. . . . .	Day..	4.00	48	4.00	48	4.00	48	4.00	48	4.50	48	4.50	48	4.50	48

## XV.—DOMESTIC SERVICE.

## HOUSEKEEPERS.\*

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.....	10	10	10	12	12	12	12	12	12	15	15	16	20	25
Charlottetown, P.E.I.....	10	10	10	10	12	12	12	15	15	15	15	18	18	20
St. John, N.B.....	12	12	12	12	12	12	13	13	13	14	14	14	15	15
Montreal, Que.....	18	18	20	20	20	20	25	25	25	25	30	30	35	37
Toronto, Ont.....	18	18	18	20	20	25	25	25	25	28	30	30	35	40
Winnipeg, Man.....	18-20	18-20	18-22	20-25	22-25	22-25	22-25	22-25	25-30	25-30 †35	25-35	25-35	30-35	30-40 †45
Regina, Sask.....	20-22	02-22	20-22	20-25	20-25	22-25	22-25	25-30	25-30	25-30	30-35	30-35	30-40	30-40
Calgary, Alta.....	10-15	10-15	10-18	10-20	12-20	15-20	15-25	15-25	18-25	18-30	18-35	20-40	20-40	20-40
Vancouver, B.C.....	20-25	20-25	20-25	22-27	22-27	22-27	25-30	25-30	27-32	27-32	32-35	32-35	35-40	35-40

(\*) Rate per month.

†Exceptionally well qualified.

## COOKS.†

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Halifax, N.S.....	8	8	10	10	10	12	12	12	12	14	14	15	15	18
Charlottetown, P.E.I.....	7	7	8	8	9	9	9	10	10	11	11	12	13	15
St. John, N.B.....	12	12	12	12	12	12	13	13	13	14	14	14	15	15
Montreal, Que.....	14	14	16	16	16	17	18	18	20	20	25	25	25	27
Toronto, Ont.....	15	15	16	16	18	18	18	19	20	23	24	24	25	25
Winnipeg, Man.....	15-18	15-18	15-18	18-20	18-20	18-22	18-22	18-22	20-25	22-25 *30	22-30	25-30	25-32	30-35 *40
Regina, Sask.....	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	20-25	25-30	25-30
Calgary, Alta.....					15-20	18-25	18-25	20-25	20-30	20-30	20-30	20-30	20-35	20-35
Vancouver, B.C.....	18-20	18-20	18-20	20-23	20-23	20-23	22-27	22-27	27-35	27-35	27-35	27-35	30-35	35-37

\*Exceptionally well qualified.

(†) Rate per month.

## GENERAL SERVANTS.†

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Halifax, N.S. . . . .	6	6	7	7	7	8	8	9	9	10	10	10	10	11
Charlottetown, P.E.I. . . . .	5	5	5	5	6	6	6	7	7	7	7	8	8	9
St. John, N.B. . . . .	10	10	10	10	10	10	11	11	11	12	12	12	13	13
Montreal, Que. . . . .	10	10	10	11	11	12	12	12	14	14	15	15	16	16
Toronto, Ont. . . . .	12	12	12	12	12	13	14	14	14	15	16	18	19	20
Winnipeg, Man. . . . .	10-12	10-12	12-13	12-14	12-14	13-15	13-15	13-15	13-16	15-17	15-17 *20	15-18	15-20	18-20 *25
Regina, Sask. . . . .	12-16	12-16	12-16	12-16	12-16	16-18	16-18	18-20	18-20	18-20	20-22	20-22	20-25	20-25
Calgary, Alta. . . . .	12-15	12-15	12-18	12-18	12-20	12-25	12-25	15-25	15-25	18-30	18-30	18-35	18-35	18-35
Vancouver, B.C. . . . .	15-20	15-20	15-20	18-20	18-22	18-22	20-22	20-22	22-25	22-25	22-27	22-27	25-30	25-30

\*Exceptionally well qualified.

(†) Rate per month.

## COOKS, GENERAL.†

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913
Halifax, N.S. . . . .	7	7	8	8	8	10	10	10	10	12	12	13	14	15
Charlottetown, P.E.I. . . . .	6	6	6	7	7	7	8	8	8	9	9	10	10	11
St. John, N.B. . . . .	10	10	10	10	10	10	11	11	11	12	12	12	13	13
Montreal, Que. . . . .	12	12	12	13	13	13	14	14	15	16	18	18	20	20
Toronto, Ont. . . . .	12	12	13	13	13	14	15	16	17	18	19	19	22	22
Winnipeg, Man. . . . .	12-13	12-13	12-15 *18	13-15	13-15	13-15	15-18	15-18	18-20	18-20	18-22	20-25	20-25	20-25
Regina, Sask. . . . .	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30	20-30	25-35	25-35	25-35
Calgary, Alta. . . . .	10-15	10-15	10-15	10-18	10-18	10-20	10-20	10-25	15-25	15-25	18-28	18-30	20-35	20-35
Vancouver, B.C. . . . .	18-20	18-20	18-20	18-22	18-22	20-22	20-25	20-25	22-25	22-25	22-27	22-27	25-30	25-30

\*Exceptionally well qualified.

(†) Rate per month.

TABLEMAIDS. (†)

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1919	1911	1912	1913
Halifax, N.S.....	6	6	7	8	8	9	9	9	9	10	10	10	12	12
Charlottetown, P.E.I.....	6	6	6	6	7	7	7	7	8	8	8	8	9	9
St. John, N.B.....	10	10	10	10	10	10	10	11	11	11	12	12	13	13
Montreal, Que.....	10	10	12	12	12	12	14	14	14	15	15	15	16	16
Toronto, Ont.....	11	11	11	11	12	12	14	14	15	16	18	18	18	20
Winnipeg, Man.....	8-10	8-10	8-10	10-12	10-12	10-12	10-12	10-12	12-15	12-16	16-18	16-18	16-20	18-20
Regina, Sask.....	12-16	12-16	12-16	12-16	12-16	16-18	16-18	18-20	18-20	18-20	20-22	20-22	20-25	20-25
Calgary, Alta.....	15-25	15-25	15-25	15-25	15-25	18-25	18-25	18-30	18-30	20-30	20-35	20-35	20-35	20-35
Vancouver, B.C.....	14-18	14-18	14-18	15-20	15-20	15-20	15-20	15-20	18-22	18-22	18-22	20-25	20-25	20-25

HOUSEMAIDS. (†)

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1919	1911	1912	1913
Halifax, N.S.....	6	6	7	7	7	7	8	8	8	10	11	12	12	12
Charlottetown, P.E.I.....	5	5	5	5	6	6	6	8	8	8	8	8	9	9
St. John, N.B.....	10	10	10	10	10	10	11	11	11	11	11	11	12	12
Montreal, Que.....	10	10	10	10	11	11	11	12	12	12	14	14	15	15
Toronto, Ont.....	12	13	14	14	14	15	15	15	15	16	17	18	18	19
Winnipeg, Man.....	8-10	8-10	8-10	10-12	10-12	10-12	10-12	10-12	12-15	12-16	16-18	16-18	16-20	18-20
Regina, Sask.....	14-16	14-16	14-16	14-16	14-16	14-16	14-16	14-16	16-18	16-18	18-20	18-20	20-25	20-25
Calgary, Alta.....					8-15	10-18	10-18	10-20	12-20	15-20	16-22	18-25	18-25	18-25
Vancouver, B.C.....	15-20	15-20	15-20	15-20	15-20	15-20	15-20	15-20	18-22	18-22	18-22	20-25	20-25	20-25

NURSEMAIDS. (†)

LOCALITY.	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1919	1911	1912	1913
Halifax, N.S.....	5	5	5	5	7	7	7	9	9	10	10	10	10	10
Charlottetown, P.E.I.....	5	5	5	5	5	6	6	6	6	7	7	7	8	8
St. John, N.B.....	6- *10	6- *10	7- *10	7- *10	7- *10	7- *10	8- *10	8- *10	8- *10	9- *10	9- *10	9- *10	10- *12	11- *12
Montreal, Que.....	8- *15	8- *15	9- *15	9- *15	9- *15	10- *17	10- *17	10- *17	12- *17	12- *18	13- *18	13- *18	14- *20	14- *20
Toronto, Ont.....	10- *15	10- *15	10- *16	10- *16	10- *16	11- *17	11- *17	12- *17	12- *18	13- *18	13- *19	15- *23	15- *23	15- *25
Winnipeg, Man.....	7-9	7-9	8-9	8-9	9-10 *15	9-10	9-10	9-10	10-12	12-15 *20	12-15	13-15	13-15	13-15 *25
Regina, Sask.....	8-10	10-12	10-12	10-12	10-12	12-15	12-15	12-15	12-15	16-18	16-18	16-18	18-20	18-20
Calgary, Alta.....	8	8	8	9	10	10	10-15	10-18	10-20	10-20	10-20	10-20	12-20	12-20
Vancouver, B.C.....	12-15	12-15	12-15	12-15	12-15	12-15	14-16	14-16	16-18	16-18	16-18	18-20	20-22	20-25

(†) Rate per Month.

\* Experienced children's nurses.



## THE COURSE OF SALARIES IN CANADA, 1900-1913.

Lack of standardization makes it difficult to measure tendencies in salaries. The qualifications of the individual and custom determine "salary" to a large extent; moreover, salaried positions of similar definition are often widely different. The same position, again, is frequently subject to change, as, for example, that of manager or bookkeeper in a growing business.

The salaries of two classes, however, lend themselves fairly well to statistical treatment, namely those of the Protestant clergy and those of Public School teachers. Both classes are widely distributed, and the nature of the services performed by both may be said to change only with broad changes in the community itself; though their salaries are perhaps less flexible than those in occupations more closely connected with the industrial life of the country, the data are much more accessible. The present review is limited to these classes.<sup>1</sup>

For data with regard to the salaries of the clergy, application was made to the governing bodies of the various Protestant churches in Canada. The statistics published herewith in Table I represent all of a comprehensive kind that were obtained in reply.

The statistics of school teachers' salaries published in Table II were taken from the annual reports of the Departments of Education of the several Provinces. They are in most cases averages and thus possibly reflect other tendencies than salary movements.

Time was not available to work out index numbers from year to year, but the per cent increase of salaries in 1912-1913 over 1900 will be found indicated in the tables. Combining these in simple averages, the following results were obtained:—

PER CENT INCREASE IN SALARIES OF THE CLERGY IN 1912-1913 COMPARED WITH 1900.<sup>2</sup>

	Nova Scotia.	Prince Edward Island.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	All.
Baptist.....	27.5	20.6	20.8	22.6	31.9	.....	.....	.....	.....	27.0
Church of England..	16.6	.....	.....	41.8	33.3	.....	.....	.....	.....	29.5
Methodist. ....	.....	.....	.....	.....	30.7	.....	.....	.....	.....	30.7
Presbyterian...	27.5	.....	9.8	22.6	35.5	67.7	.....	.....	45.6	34.0
All.....	22.6	20.6	18.8	30.4	33.6	67.7	.....	.....	45.6	30.3

<sup>1</sup> Government employees are a third, but as their salaries are fixed by law, they move only at long intervals and abruptly.

<sup>2</sup> Omitting all decreases and all increases of over 100 per cent as due to abnormal circumstances.

PER CENT INCREASE IN SALARIES OF PUBLIC SCHOOL TEACHERS 1912-1913,  
COMPARED WITH 1900.

	Nova Scotia.	Prince Edward Island.	New Brunswick.	Quebec.	Ontario.	Manitoba.	Saskatchewan.	Alberta.	British Columbia.	All.
Male. ....	36.1	36.2	49.0	88.8	61.8	.....	30.5	33.2	54.3	46.0
Female.....	27.4	36.1	67.1	106.2	72.9	.....	38.2	32.5	36.8	49.1
Unclassified. ....	.....	.....	23.1	.....	.....	43.9	.....	.....	38.3	37.0
All.....	33.0	36.1	49.3	97.5	67.8	43.9	34.3	32.9	42.4	46.7

As above pointed out, the salaries of these classes respond to broad changes in the community as well as to changes in the cost of living; when the former changes have been material, the salaries are, strictly speaking, on a changing basis from year to year. Thus the rapid rise in the salaries of Presbyterian ministers west of the Great Lakes is doubtless largely an index of the growth in the size of congregations. Even when all increases of over 100 per cent are omitted it shows markedly in the above analysis. The figures for the eastern provinces where conditions have been more stable are accordingly a better index as to the extent to which salaries of ministers and clergy have responded to the rise in the cost of living alone.

The same remark holds to a certain extent in the matter of teachers' salaries. The high rate of increase in the West reflects general development as well as cost of living conditions. The pronounced rise shown by Quebec is a reaction from the abnormally low salaries which prevailed a few years ago.

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913.

## THE BAPTIST CHURCH.

	1903.	1911.	1913.	Per cent Increase 1913 over 1903.		
	\$	\$	\$			
Nova Scotia—						
Halifax (First).....	1,800	2,000	2,000	11·1		
" (North).....	1,200	1,600	1,800	50·0		
" Tabernacle).....	1,200	1,250	1,400	16·7		
Dartmouth (First).....	800	900	1,000	25·0		
Windsor.....	1,000	1,000	1,200	20·0		
Wolfville.....	1,200	1,500	1,800	50·0		
Middleton.....	800	1,000	1,200	50·0		
Digby.....	700	900	1,000	42·8		
Yarmouth (First).....	1,100	1,200	1,300	18·2		
" (Temple).....	900	1,000	1,000	11·1		
Liverpool.....	650	800	800	23·1		
Lunenburg.....	600	700	700	16·7		
Truro (First).....	1,000	1,200	1,200	20·0		
" (Emmanuel).....	1,000	1,200	1,200	20·0		
Amherst.....	1,500	1,500	1,800	20·0		
New Glasgow.....	700	800	800	14·3		
Sydney (Pitt street).....	700	900	1,000	42·8		
" (Bethany).....	700	800	900	28·6		
Berwick.....	700	1,000	1,000	42·8		
Prince Edward Island—						
Charlottetown.....	1,000	1,000	1,000	0		
Summerside.....	700	800	900	28·6		
Montague.....	600	800	800	33·3		
New Brunswick—						
St. John (Germain street).....	1,600	1,800	1,800	12·5		
" (Main street).....	1,600	1,800	1,800	12·5		
" (Leinster).....	1,100	1,200	1,250	13·6		
" (Brussels street).....	1,100	1,200	1,300	18·2		
" (Victoria street).....	1,000	1,000	1,100	10·0		
" (Charlotte street).....	900	1,200	1,200	33·3		
Fredericton (Brunswick street).....	1,300	1,400	1,700	30·8		
" (George street).....	800	900	1,000	25·0		
Woodstock.....	900	1,240	1,250	38·9		
St. Stephen.....	1,000	1,100	1,100	10·0		
Moncton (First).....	1,700	1,800	1,900	5·9		
" (Highfield street).....	900	1,000	1,000	11·1		
Sussex (Main street).....	1,000	1,200	1,400	40·0		
" (Church avenue).....	800	850	1,000	25·0		
Newcastle.....	800	800	800	00·0		
Campbellton.....	900	1,100	1,200	33·3		
Sackville.....	900	900	1,000	11·1		
Hampton.....	700	800	1,000	42·8		
Quebec—						
	1903.	1905.	1910.	1912.	1913.	
Quebec.....	1,100		1,100	1,200		9·1
Sherbrooke.....	400			600	600	50·0
Montreal (First).....	2,227	2,415	2,500	2,500	2,500	12·2
" (Olivet).....	2,625	2,620	2,500	2,750	3,000	14·3
" (Westmont).....	455	1,600	2,100	2,100		361·5
" (Point St. Charles).....	1,100	1,200	1,200	1,400	1,400	27·3
Ontario—						
Ottawa (First).....	1,800	2,000	2,000	1,666	1,500	16·7
" (McPhail).....	1,200	1,240	1,600	1,600	1,800	50·
" (Fourth Ave.).....	550	650	1,500	1,600	1,333	142·2
Brockville.....	1,275	1,360	1,400	1,300	1,200	5·9
Kingston (First).....	800	800	900	900	900	12·5
" (Union st.).....	600	650	507	600	600	
Belleville.....	1,000	1,000	1,000	1,100	1,200	20·
Peterborough (Murray st.).....	1,100	1,000	1,500	1,800	1,800	63·6
" (Park st.).....	600	712	869	1,140	1,000	66·7
Orillia.....	700		811	891	900	28·6

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*THE BAPTIST CHURCH—*Continued.*

	1903.	1905.	1910.	1912.	1913.	Per Cent Increase 1913 over 1903.
	\$	\$	\$	\$	\$	
<i>Ontario—Continued.</i>						
Toronto (Jarvis st.).....	4,343	4,175	.....	6,000	6,562	51·1
" (Walnar road).....	2,880	3,872	3,300	4,000	4,000	38·9
" (Bloor st.).....	2,230	2,500	2,600	3,000	3,000	34·5
" (Memorial).....	1,199	975	1,000	.....	.....	.....
" (Dovercourt road)....	1,200	1,206	2,400	2,400	2,000	66·7
" (First Ave.).....	1,000	1,180	1,800	2,000	2,000	100·
" (Immanuel).....	1,200	1,200	1,400	1,400	1,500	25·
" (College).....	1,460	2,040	2,300	2,600	2,600	78·1
" (Western).....	1,100	1,200	1,800	1,800	.....	63·6
" (Parliament St.).....	800	910	1,200	1,200	.....	50·
St. Catharines (Queen st.)...	1,705	2,024	1,200	1,400	1,500	-12·
" (Lyman st.).....	.....	.....	.....	.....	.....	.....
Niagara Falls (First).....	608	679	900	900	925	52·1
" (South).....	527	886	676	842	1,025	94·5
Hamilton (Wentworth st.)....	1,085	1,547	1,000	1,100	.....	1·4
" (James st.).....	4,872	4,435	2,000	2,609	-2,500	49·7
Brantford (First).....	1,200	1,300	1,400	1,800	2,000	66·7
" (Park).....	1,400	1,430	1,795	1,984	2,000	42·8
" (Calvary).....	1,200	1,300	1,300	1,200	1,200	.....
" (Immanuel).....	750	900	1,200	900	900	20·
Guelph (First).....	800	800	832	1,600	1,600	100·
" (Trinity).....	805	734	.....	.....	.....	.....
Berlin (King st.).....	400	475	950	1,000	1,146	186·5
" (Benton st.).....	.....	.....	.....	1,054	1,200	.....
Galt.....	800	800	.....	900	900	12·5
Woodstock (First).....	1,200	1,200	1,600	1,500	1,500	25·0
" (Oxford st.).....	668	721	800	900	900	34·7
Stratford.....	1,100	1,107	1,200	1,500	1,500	36·4
London (Talbot st.).....	1,900	1,580	2,000	2,000	2,000	5·3
" (Adelaide st.).....	1,000	1,737	1,500	1,700	1,700	70·0
" (Egerton st.).....	105	343	900	1,000	826	686·7
" (Maitland st.).....	470	550	900	1,000	1,000	112·8
" (South Worthey).....	800	800	1,000	1,000	1,000	25·0
St. Thomas.....	1,200	1,426	1,107	1,600	1,600	33·0
Owen Sound.....	1,000	1,000	1,300	1,300	1,345	34·5
Sault Ste. Marie.....	1,000	1,938	.....	.....	1,300	30·0
Port Arthur.....	450	1,467	1,278	1,500	1,500	233·3
Fort William.....	577	1,135	1,300	.....	1,400	142·6



TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*

DIOCESE OF QUEBEC.		First year's service.	Second year's service.	Third year's service.	Fourth year's service.	Fifth year's service.	Service 5 to 10 years.	Service 10 to 15 years.	Service 15 to 20 years.	Service 20 years and longer.
Year.		\$	\$	\$	\$	\$	\$	\$	\$	\$
1900.	.....	600	600	600	600	600	700	750	800	800
1905.	.....	600	600	600	600	600	750	900	900	900
1909.	.....	700	700	700	725	750	825	950	1,000	1,000
1911.	.....	800	850	900	950	1,000	1,000	1,000	1,000	1,000
1913.	.....	800	850	900	950	1,000	1,000	1,000	1,000	1,000
Per cent incr. 1913 over 1900.		33.3	41.7	50.0	58.3	66.7	42.8	33.3	25.0	25.0

CHURCH OF ENGLAND—*Continued.*

DIOCESE OF OTTAWA.		1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	Per cent Increase 1913 over 1900.
Parishes.		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
1.	.....	2,800	2,800	2,146	2,538	2,850	2,800	2,500	2,800	3,100	3,300	3,300	3,575	3,400	3,400	21.4
2.	.....	1,350	1,275	1,275	1,350	1,369	1,375	1,325	1,300	1,425	1,766	2,101	2,371	2,343	2,275	68.5
3.	.....	1,000	1,000	1,000	1,000	1,000	1,000	718	1,000	725	800	870	1,000	1,117	1,117	11.7
4.	.....	744	791	924	836	866	866	866	869	819	835	879	872	900	860	15.6
5.	.....	2,000	2,000	2,000	2,300	2,800	2,900	2,800	2,932	2,180	3,291	2,915	3,557	4,275	4,400	120.0
6.	.....	2,889	1,710	1,223	750	1,475	1,660	1,603	1,820	2,082	2,622	2,777	2,600	2,800	2,800	8.1
7.	.....	1,000	1,000	861	902	1,200	1,300	1,400	1,500	1,500	1,700	1,700	1,800	2,533	2,800	180.0
8.	.....	1,200	1,200	1,200	1,400	1,400	1,600	1,700	1,800	2,000	2,200	2,000	2,000	2,400	2,435	102.0
9.	.....	200	211	225	258	415	760	750	1,000	1,000	600	775	1,000	1,083	1,200	100.0
10.	.....	1,500	1,500	1,750	1,750	1,500	1,500	1,600	1,600	1,600	1,600	1,800	1,057	1,000	1,100	43.0
11.	.....	1,103	858	1,000	1,000	1,000	1,000	1,000	1,200	1,200	1,200	1,200	1,400	1,400	1,400	26.9
12.	.....	900	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	879	1,204	1,006	50.4
13.	.....	665	737	635	886	800	1,003	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	23.9
14.	.....	807	887	1,000	1,000	1,000	1,074	1,000	1,000	1,000	1,200	1,000	1,000	1,000	1,000	23.4
15.	.....	810	765	765	810	765	825	832	800	450	1,200	1,000	1,000	1,000	1,000	34.4
16.	.....	1,042	1,042	1,042	1,041	1,041	1,041	1,270	1,103	1,139	1,140	1,140	1,140	1,200	1,400	38.9
17.	.....	411	505	464	461	510	485	540	730	349	588	402	479	571	1,200	50.0
18.	.....	800	800	800	800	800	900	867	800	800	800	800	1,153	1,200	1,200	50.0
19.	.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,100	1,100	1,100	1,100	1,000	1,000	1,100	10.0
20.	.....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,100	1,100	1,100	1,100	1,000	1,000	1,100	10.0

\* Parishes Nos. 6 and 11 were amalgamated in 1913.



TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*CHURCH OF ENGLAND—*Continued.*

DIOCESE OF ONTARIO.	Parishes.											Per cent increase 1913 over 1902.
	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.*	1913.
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
Kingston (St. James').....	1,861	1,938	1,844	1,920	1,964	2,118	2,149	2,053	1,725	1,725	.....	2,225
" (St. Paul's).....	1,025	1,075	1,125	1,250	1,250	1,600	1,400	1,400	1,400	1,400	.....	1,400
" (St. Luke's).....	.....	.....	.....	1,000	1,000	1,150	1,175	800	1,175	800	.....	1,000
Belleville (St. Thomas').....	1,750	1,220	1,335	1,572	1,814	1,814	1,842	1,420	1,511	1,561	.....	1,799
" (Christ Church).....	1,000	1,000	1,032	1,325	1,325	1,058	1,175	1,175	1,325	1,428	.....	1,500
Brockville (St. Peter's).....	1,050	962	1,137	967	1,050	1,087	1,050	1,050	1,050	1,050	.....	1,050
" (Trinity).....	1,323	1,323	1,279	1,362	1,237	1,282	1,200	1,287	1,200	1,200	.....	1,355
" (St. Paul's).....	1,200	1,200	1,240	1,200	1,200	1,000	1,000	1,180	1,200	1,200	.....	1,000
Gananoque.....	800	800	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	.....	1,494
Merrickville.....	770	810	784	987	870	855	850	850	1,079	1,014	.....	1,101
Prescott.....	1,051	1,180	1,029	1,133	1,372	1,185	1,129	1,152	1,450	1,450	.....	1,473
Kemptville.....	839	855	1,316	1,732	1,732	1,732	743	1,432	1,432	1,432	.....	1,497
Trenton.....	981	974	974	1,043	1,043	954	1,019	1,007	1,091	1,090	.....	982
Napanee.....	849	800	800	897	769	885	885	1,200	1,210	1,178	.....	1,200

\* No Synod in 1912, and no returns of stipends.

DIOCESE OF ALBAMA.				Per cent increase 1914 over 1900.	
1900.	1912.	1914.			
\$	\$	\$			
Sault Ste. Marie (St. Luke's).....	.....	1,800	125 0		
" (St. John's).....	.....	800	33 3		
Port Arthur.....	.....	1,500	50 0		
Fort William (St. Luke's).....	.....	1,200	33 3		
" (St. Paul's).....	.....	1,000	50 0		
Sudbury.....	.....	1,200	140 0		
North Bay.....	.....	1,400	180 0		
Cobalt.....	.....	1,000	50 0		
Haileybury.....	.....	1,500	20 0		
Perry Sound.....	.....	800	60 0		
Huntsville.....	.....	1,000	66 7		
Bracebridge.....	.....	900	66 7		
Gravenhurst.....	.....	800	60 0		

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—Continued.

## THE METHODIST CHURCH.

Bay of Quinte Conference.	1900.	1901.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.	1913.	Percent increase 1913 over 1900.
Circuit:															
Lin' say, (a).....	1,200	1,340	1,300	1,300	1,300	1,400	1,400	1,400	1,400	1,400	1,400	1,500	1,500	1,500	25.0
Bowmanville, (a).....	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,200	1,200	1,200	1,300	1,300	1,300	30.0
Pictou, (a).....	1,200	1,200	1,200	1,200	1,200	1,200	1,200	1,300	1,300	1,300	1,300	1,300	1,300	1,400	16.7
Cannington, (b).....	740	750	752	752	740	840	840	940	900	900	900	900	900	1,000	35.1
Brighton, (b).....	800	800	800	800	800	800	800	850	900	1,000	1,000	1,000	1,000	1,000	25.0
Madoc, (b).....	800	800	850	850	850	900	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	25.0
Atherly, (c).....	500	480	540	540	540	490	500	690	700	700	700	750	750	810	62.0
Prince Albert, (c).....	590	640	640	650	640	640	640	750	600	650	700	700	700	700	18.6
Shannonville, (c).....	540	565	600	520	540	540	580	640	750	750	750	750	750	750	38.9

NOTE.—The "A," "B" and "C" has no significance, other than to denote the financial grade of the circuits mentioned.

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*

## THE PRESBYTERIAN CHURCH.

## NOVA SCOTIA.

	1900.	1904.	1906.	1910.	1913.	Per cent increase 1913 over 1900.
	\$	\$	\$	\$	\$	
Halifax, (St. Matthews).....	2,000	2,000	2,000	2,500	2,500	25.0
" (St. Andrews).....	2,000	1,800	2,000	2,000	2,000	.....
" (Fort Massey).....	2,500	2,500	2,500	3,000	3,000	20.0
" (Park St.).....	1,200	1,200	1,400	1,800	2,000	66.7
" (St. John's).....	1,200	1,300	1,400	1,000	1,600	33.3
" (Grove St.).....	1,000	1,000	1,000	1,200	1,200	20.0

## NEW BRUNSWICK.

	1900.	1904.	1906.	1910.	1913.	Per cent increase 1913 over 1900.
	\$	\$	\$	\$	\$	
St. John, (St. John's).....	1,500	1,100	1,200	1,200	1,400	-6.7
" (St. Andrews).....	2,250	1,500	1,500	2,000	2,500	11.1
" (St. Stephens).....	1,625	1,763	1,230	2,025	2,025	24.6
" (St. David's).....	2,000	1,618	2,000	2,200	2,200	10.0

## QUEBEC.

	1900.	1904.	1906.	1910.	1913.	Per cent increase 1913 over 1900.
	\$	\$	\$	\$	\$	
Quebec, (St. Andrew's).....	1,800	2,000	2,000	2,000	2,200	22.2
" (Chalmers).....	2,000	1,869	2,000	2,000	2,000	.....
Sherbrooke.....	1,100	1,145	1,414	1,300	1,500	36.4
Montreal, (Calvin).....	1,500	1,500	1,500	1,600	2,000	33.3
" (Erskine).....	4,000	4,000	4,000	4,450	6,000	50.0
" (Knox).....	3,000	3,000	3,000	3,000	2,500	-16.7
" (Stanley).....	2,200	.....	.....	2,200	2,500	13.6
" (St. Matthews).....	1,600	.....	.....	2,000	2,000	25.0

## ONTARIO.

	1900.	1904.	1906.	1910.	1913.	Per cent increase 1913 over 1900.
	\$	\$	\$	\$	\$	
Ottawa, (St. Paul's).....	1,800	1,800	1,800	2,000	2,400	33.3
" (St. Andrew's).....	4,500	4,500	4,500	5,500	5,500	22.2
" (Knox).....	2,500	2,500	2,500	2,800	2,800	12.0
" (Glebe).....	1,150	1,250	1,500	2,000	2,200	91.3
" (Erskine).....	1,224	1,255	1,500	2,000	2,000	63.4
" (Bank St. and Chalmers).....	2,400	2,000	2,000	2,800	*2,800	16.7
" (Stewarton).....	1,100	1,113	1,500	2,000	2,600	136.4
Kingston (St. Andrews).....	1,800	1,800	1,800	2,000	2,000	11.1
" (Chalmers).....	2,000	2,000	2,000	2,250	2,250	12.5
" (Cooke's).....	833	1,000	1,200	1,400	1,400	68.1
" (Zion).....	.....	900	900	900	900	.....
Belleville (St. Andrews).....	1,500	1,331	1,223	1,150	1,300	86.7
" (John St.).....	1,400	1,400	1,400	1,600	1,600	14.3
Peterborough (St. Paul's).....	1,600	1,600	1,600	2,500	2,500	56.0
" (St. Andrew's).....	1,200	1,200	1,400	1,400	1,600	33.3
Toronto (College).....	2,000	2,000	2,500	3,800	4,500	125.0
" (Bonar).....	1,200	1,500	1,650	2,000	2,000	66.7
" (Queen St. E.).....	1,200	1,200	1,200	1,500	2,000	66.7
" (West).....	2,000	2,000	2,000	2,250	2,970	48.5
" (Westminster).....	2,200	2,500	3,000	4,500	5,000	127.3
" (Bloor).....	3,000	3,000	3,300	4,167	6,000	100.0
" (Erskine).....	2,000	2,400	2,600	2,800	2,800	40.0
" (St. James' Sq.).....	3,500	3,500	3,500	3,500	3,500	8.6
" (Knox).....	4,000	2,100	5,212	6,000	7,350	127.3
" (Parkdale).....	2,250	2,500	3,250	3,500	3,750	66.7

\* Bank St. Church demolished and new Church "Chalmers" erected.

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*THE PRESBYTERIAN CHURCH—*Continued.*ONTARIO—*Continued.*

	1900.	1904.	1906.	1910.	1913.	Per cent inc, 1913 over 1900.
	\$	\$	\$	\$	\$	
Toronto (Cooke's).....	1,829	2,150	2,350	3,000	5,700	211.6
" (Chalmers).....	1,700	2,000	2,400	2,000	3,000	76.5
" (St. Paul's).....	1,000	1,200	1,500	2,000	2,200	120.0
Port Arthur (St. Paul's).....	1,200	1,400	1,400	1,600	2,500	108.3
Fort William (St. Andrew's).....	1,000	1,200	1,400	1,800	2,040	104.0
Niagara Falls (St. Andrews).....	1,000	1,000	1,000	1,065	1,500	50.0
St. Catharines (Knox).....	1,500	1,500	1,600	1,600	1,800	20.0
" (First).....	1,200	1,200	1,200	1,200	1,400	16.7
Hamilton (McNab St.).....	2,400	2,400	1,800	2,200	2,400	
" (Central).....	4,000	4,000	4,000	3,300	3,000	25.0
" (St. John's).....	1,800	1,800	1,800	2,000	2,200	22.2
" (Erskine).....	1,400	1,700	1,700	2,000	2,200	57.1
" (Knox).....	3,000	2,500	1,900	2,700	2,492	-16.9
" (St. Andrews).....		1,700	1,500	1,900	2,000	17.6
" (St. Paul's).....	2,700	2,775	3,000	3,300	3,800	40.7
Brantford (Zion).....	2,430	2,496	2,495	3,050	3,000	23.4
" (St. Andrews).....	1,200	1,246	1,500	1,500	1,500	25.0
" (Alexandra).....		900	1,000	1,264	1,400	55.0
Galt (Knox).....	3,000			3,000	3,350	11.7
" (Central).....	1,800			1,800	1,800	
Guelph (Chalmers).....	2,100	1,800	1,800	2,000	2,500	19.0
" (Knox).....	1,600	1,700	1,800	1,800	2,763	72.7
" (St. Andrew's).....	1,600	1,800	1,420	2,000	2,500	56.2
Berlin (St. Andrew's).....	1,400	1,400	1,500	1,600	2,000	42.8
Woodstock (Knox).....	1,500	1,500	1,500	1,800	2,200	46.7
" (Chalmers).....	1,200	1,200	1,315	1,400	1,600	33.3
London (First).....	2,400	2,700	2,700	2,500	2,500	4.2
" (Knox).....	1,500	1,600	1,700	1,700	1,700	13.3
" (St. James).....	1,600	1,800	3,589	2,000	2,200	37.5
" (St. Andrew's).....	2,800	2,679	3,000	3,000	4,200	50.0
St. Thomas (Knox).....	2,000	2,000	2,000	2,500	2,300	15.0
Stratford (St. Andrew's).....	1,200	1,200	1,200	1,200	1,200	
" (Knox).....	2,000	2,000	2,500	2,500	2,500	25.0
Owen Sound (Division St.).....	1,400	1,600	1,800	1,800	2,500	78.6
" (Knox).....	1,400	1,600	1,800	1,800	2,100	50.0

## MANITOBA.

Winnipeg. (Augustine).....	2,000	2,500	3,440	5,882	194.1
" (Knox).....	3,500	4,085	4,333	5,300	68.6
" (Pt. Douglas).....	1,000	1,500	1,665	1,745	74.5
" (St. Giles).....	1,000	1,000	1,500	1,800	160.0
" (St. Paul's).....		1,000	1,500	2,000	274.5
" (St. Stephens).....	1,800	2,500	2,500	3,000	166.7
" (Westminster).....	2,500	2,205	3,000	4,000	60.0

## SASKATCHEWAN.

Regina (Knox).....	1,500	1,800	2,578	2,500	3,000	100.0
Moosejaw (St. Andrew's).....	1,165	1,428	1,810	2,000	5,000	329.0
Saskatoon ( " ).....		600		1,500	3,000	450.0
Prince Albert (St. Paul's).....	753		1,118	1,500	2,500	232.0

## ALBERTA.

Calgary (Knox).....	1,500	1,800	1,800	2,900	4,800	220.0
Medicine Hat (St. John's).....	800	1,065	1,060	1,500	2,000	150.0
Lethbridge (Knox).....	1,200	1,250	1,200	1,200	2,400	100.0
Macleod.....	650	964	956	1,200	1,800	176.9
Edmonton (First).....	1,200	1,500	1,800	3,750	4,533	277.9

TABLE I.—Salaries of Ministers and Clergy, Canada, 1900-1913—*Continued.*THE PRESBYTERIAN CHURCH—*Continued.*

## BRITISH COLUMBIA.

Manitoba.	1900.	1904.	1906.	1910.	1913.	Per Cent Inc. 1913 over 1900.
	\$	\$	\$	\$	\$	
Nelson (St. Paul's) . . . . .	1,440	1,500	1,500	1,500	2,000	38·9
New Westminster (St. Andrew's)	1,200	1,200	1,200	1,600	1,843	53·6
Vancouver (First) . . . . .	1,500	1,715	2,250	2,500	3,000	100·0
" (Mt. Pleasant) . . . . .	1,000	1,200	1,200	2,500	3,600	260·0
" (St. Andrew's) . . . . .	2,500	3,037	3,350	3,440	5,975	139·0
" (Chalmers) . . . . .	.....	795	1,200	2,000	2,500	114·5
Victoria (St. Andrew's) . . . . .	2,500	.....	.....	3,000	3,500	40·0
" (First) . . . . .	2,000	.....	.....	2,000	3,000	50·0

TABLE II.—Average annual salaries of teachers in Public Schools, Canada, 1900-1913.

## NOVA SCOTIA.

Year Ended July 31.	Class "A"		Class "B"		Class "C"		Class "D"	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1900 . . . . .	732·55	422·62	391·83	293·25	272·11	230·87	189·88	166·35
1901 . . . . .	763·41	432·87	384·34	293·92	257·61	233·62	192·68	165·41
1902 . . . . .	798·16	429·42	393·82	293·72	262·36	229·78	186·63	168·31
1903 . . . . .	809·04	456·77	438·36	292·81	253·08	230·28	188·44	166·81
1904 . . . . .	897·79	533·56	456·39	308·73	278·32	242·32	196·56	177·17
1905 . . . . .	867·22	520·22	468·12	312·36	281·47	245·26	205·36	178·05
1906 . . . . .	887·45	541·08	484·79	322·41	304·95	249·00	199·53	185·90
1907 . . . . .	897·72	537·07	521·14	334·42	358·23	249·90	214·20	182·96
1908 . . . . .	923·97	598·48	520·36	343·54	348·48	261·61	218·93	134·36
1909 . . . . .	1007·22	629·70	531·47	346·44	358·47	274·20	210·46	195·69
1910 . . . . .	969·63	636·58	562·45	358·42	342·15	279·09	222·15	198·85
1911 . . . . .	1054·35	652·25	569·42	360·12	335·86	285·48	235·34	207·59
1912 . . . . .	867·00	491·89	572·49	368·89	359·59	290·39	236·18	215·18
1913 . . . . .	918·33	501·31	610·60	373·92	385·29	298·89	249·70	222·94
Per cent inc. 1913 over 1900 . . . . .	25·4	18·6	55·8	27·5	41·6	29·5	31·5	34·0

TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

## PRINCE EDWARD ISLAND.

Year ended June 30.	Male.			Female.		
	1st Class.	2nd Class.	3rd class.	1st Class.	2nd Class.	3rd Class.
1900 .....						
1901 .....						
1902 .....	286·37	233·19	185·89	196·66	183·50	146·61
1903 .....	325·81	236·44	187·87	196·28	191·70	144·30
1904 .....	318·79	243·73	193·06	212·65	187·48	147·96
1905 .....	343·31	245·82	193·41	227·74	195·56	155·70
1906 .....	339·55	246·84	196·35	226·54	196·70	153·66
1907 .....	372·00	245·17	195·68	231·93	200·98	160·78
1908 .....	362·58	251·42	201·78	239·87	203·94	157·06
1909 .....	372·12	251·11	187·80	241·32	204·61	157·43
1910 .....	386·86	253·61	202·25	244·70	205·16	155·77
1911 .....	388·82	255·98	200·25	250·12	200·25	189·06
1912 .....	425·81	258·32	203·57	277·93	208·35	157·22
1913 .....	459·04	290·18	224·39	305·36	238·78	180·36
Per Cent inc. 1913 over earliest years.....	60·3	27·7	20·7	55·2	30·0	23·0



TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

NEW BRUNSWICK.

Year ended June 30th.	Grammar School Teachers.	Superior School Teachers.	Common Schools.					
			Male.			Female.		
			1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.
			\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1900.....	913 00	577 80	463 33	278 30	219 02	306 81	228 82	183 81
1901.....	928 26	576 07	520 10	276 48	221 41	312 69	228 78	179 34
1902.....	954 54	569 41	510 59	286 89	220 85	315 25	232 38	180 51
1903.....	958 70	570 96	522 86	291 22	199 77	328 21	237 34	186 30
1904.....	967 70	583 53	542 07	302 42	232 17	329 77	240 75	190 71
1905.....	979 52	587 54	577 07	316 09	254 90	339 13	248 23	194 90
1906.....	1,007 00	611 17	609 90	319 84	238 91	356 95	255 85	198 12
1907.....	1,009 00	627 97	663 48	333 85	248 83	360 12	264 14	206 13
1908.....	1,005 83	675 04	663 22	350 70	266 90	386 88	286 53	217 65
1909.....	1,084 00	689 20	641 31	352 00	262 19	375 25	288 66	218 69
1910.....	1,064 03	692 22	663 28	355 29	260 90	389 71	290 25	227 91
1911.....	1,050 08	692 46	677 26	349 23	270 62	402 38	291 50	228 99
1912.....	1,099 79	728 46	683 54	363 40	282 40	408 79	300 16	234 16
1913.....	1,104 20	723 70	845 48	374 91	281 92	418 92	308 02	239 17
Per Cent Inc. 1913 over 1900 .....	20.9	25.2	82.5	34.7	29.7	136.5	34.8	30.1

TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

QUEBEC.

Year ended.	Roman Catholic Elementary Schools.				Roman Catholic Model Schools and Academies.				Protestant Elementary Schools.				Protestant Model Schools and Academies.			
	Towns.		Country.		Towns.		Country.		Towns.		Country.		Towns.		Country.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
June.																
1900.	242	111	221	112	487	130	336	130	613	152	265	149	830	291	628	264
1901.	363	148	213	110	603	137	328	135	1,149	367	515	151	1,075	410	601	246
1902.	400	153	238	113	588	160	345	138	1,202	367	515	151	1,137	386	627	255
1903.	340	158	255	118	602	164	363	139	1,168	369	415	153	1,054	381	627	255
1904.	394	174	263	117	603	206	363	139	1,285	378	550	161	1,090	389	666	240
1905.	515	170	262	119	689	178	358	138	1,309	411	739	179	1,178	394	656	258
1906.	800	179	262	119	715	198	341	142	1,474	400	400	191	1,152	400	714	275
1907.	800	146	281	121	753	190	350	140	1,333	408	160	195	1,191	412	697	300
1908.	500	177	275	125	792	197	380	141	1,430	431	350	214	1,312	476	851	319
1909.	417	187	255	130	756	196	05	151	1,497	441	340	221	1,293	405	862	334
1910.	500	197	264	133	796	230	419	149	1,506	495	340	229	1,554	485	933	350
1911.	400	202	301	136	815	257	420	154	1,410	511	600	243	1,353	479	963	374
1912.	467	217	321	138	781	265	419	159	1,440	437	700	281	1,205	738	1,013	381
1913.	541	226	415	154	830	278	522	170	1,475	627	439	282	1,330	617	1,135	433
Per cent inc. 1913 over 1900.	123.5	103.6	87.8	37.5	70.4	113.8	55.1	30.7	122.4	312.5	169.7	75.8	60.2	112.0	89.7	64.0

TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

## ONTARIO.

Year.	Highest salary paid.	Average salary Province.		Cities Towns.				Incorporated Villages.		Rural schools.		Urban schools.	
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
1900	1,500	404	298	892	455	624	309	.....	.....	349	255	.....	.....
1901	1,550	421	306	915	470	649	315	.....	.....	359	262	.....	.....
1902	1,600	436	313	935	479	667	317	.....	.....	372	271	.....	.....
1903	1,600	465	324	951	491	678	327	.....	.....	387	283	.....	.....
1904	1,600	485	335	953	498	705	341	.....	.....	402*	285*	.....	.....
1905	1,600	514	348	1,003	503	746	344	.....	.....	402	311	.....	.....
1906	1,700	547	369	1,039	533	761	382	.....	.....	425	325	.....	.....
1907	1,900	596	420	1,157	592	800	406	.....	.....	458	379	.....	.....
1908	2,000	624	432	1,305	623	837	423	.....	.....	462	382	.....	.....
1909	2,000	660	449	1,264	633	872	437	.....	.....	484	399	.....	.....
1910	2,100	711	483	1,364	659	933	472	.....	.....	508	431	.....	.....
1911	2,200	707	518	1,395	706	963	496	.....	.....	535	464	.....	.....
1912	2,200	738	545	1,320	703	977	519	.....	.....	566	493	.....	.....
1913	2,300	838	575	1,423	726	1,022	553	.....	.....	591	524	.....	.....
Per cent increase 1913 over 1900	53.3	107.4	92.9	59.5	59.6	63.8	79.0	35.5	63.6	69.3	105.5	35.1	42.8

\*For the first time (1904) the salaries of purely Rural Schools are given. Prior to 1904 Incorporated Villages were included with Counties and appear under the heading "Rural Schools."

TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

## MANITOBA.

Year ended June 30.	Highest Salary in Province.	Average Salary for Province.	Average Salary for Cities and Towns.	Highest Salary Rural Schools.	Average Salary Rural Schools.
1900 . . . . .	1800	449·37	584·13	700	406·78
1901 . . . . .	1800	457·52	576·41	700	435·15
1902 . . . . .	1800	464·54	570·29	700	442·24
1903 . . . . .	1800	488·11	598·18	700	451·39
1904 . . . . .	2400	541·28	629·85	800	466·13
1905 . . . . .	2400	514·34	666·55	800	459·98
1906 . . . . .	2400	542·38	663·15	850	491·93
1907 . . . . .	2400	581·36	701·26	725	515·32
1908 . . . . .	2400	587·97	667·74	800	520·91
1909 . . . . .	2700	620·90	736·52	800	551·61
1910 . . . . .	2700	628·25	749·44	800	544·22
1911 . . . . .	2800	668·75	775·59	900	586·52
1912 . . . . .	3500	782·75	852·09	900	544·68
1913 . . . . .	3500	782·75	852·99	900	544·68
Per cent Inc. 1913 over 1900.	94·4	51·9	45·9	28·6	33·9



TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*

## ALBERTA.

	Schools Open the Whole Year.							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit only.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	741 08	620 90	.....	580 00	615 63	572 10	570 00	505 47
1906.....	807 10	640 50	.....	595 96	610 01	585 07	586 66	554 87
1907.....	910 05	674 40	.....	619 80	652 55	574 40	725 00	591 00
1908.....	973 55	700 00	.....	674 80	702 00	641 10	600 00	611 00
1909.....	1,021 98	736 81	654 66	634 05	717 42	649 28	620 66	610 92
1910.....	1,092 40	748 00	690 83	647 87	749 78	684 84	658 15	637 89
1911.....	1,096 74	771 32	706 91	636 44	741 66	697 05	661 11	637 40
1912.....	1,204 39	788 69	708 75	695 50	824 64	744 13	696 68	692 19
1913.....	1,250 29	927 23	765 60	743 63	859 42	769 86	730 17	708 04
Per cent increase 1913 over 1905.	68·7	49·3	16·9	28·2	39·6	34·6	28·1	40·1

	Schools Open Part of Year.							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	612 00	607 00	660 00	540 00	510 00	578 70	555 00	600 00
1906.....	615 00	622 10	.....	600 00	600 00	586 05	600 00	533 00
1907.....	624 25	623 30	.....	613 10	608 30	630 80	600 00	594 90
1908.....	644 62	649 37	.....	621 83	653 69	637 00	630 00	614 68
1909.....	691 88	666 10	653 33	632 85	654 61	649 07	626 87	598 64
1910.....	706 70	695 79	677 07	664 61	632 14	678 13	666 93	628 91
1911.....	725 40	712 53	702 55	682 79	717 89	699 76	686 56	666 07
1912.....	716 91	706 19	689 09	669 53	702 47	688 17	673 92	631 25
1913.....	769 00	761 08	751 56	741 13	765 43	745 68	729 34	721 37
Per cent increase 1913 over 1905.	25·6	25·4	13·9	37·2	41·7	28·8	31·4	20·2

	Town Schools.							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	941 92	685 00	.....	.....	629 05	591 00	540 00	500 00
1906.....	1,042 70	845 00	.....	700 00	608 28	582 18	.....	500 00
1907.....	1,080 60	839 60	.....	.....	671 90	547 10	850 00	583 30
1908.....	1,235 32	1,029 41	.....	820 00	732 27	661 00	700 00	660 00
1909.....	1,152 42	972 59	750 00	.....	741 93	669 52	660 00	650 00
1910.....	1,268 15	932 14	775 00	.....	739 90	678 75	658 75	480 00
1911.....	1,230 31	987 18	833 33	.....	745 05	701 06	695 33	780 00
1912.....	1,528 52	987 33	778 66	.....	745 79	693 35	691 17	840 00
1913.....	1,525 28	1,088 42	895 00	.....	962 15	788 52	756 17	735 00
Per cent increase 1913 over 1905.	61·9	58·9	19·3	.....	52·9	33·4	40·0	47·0



TABLE II.—Average annual salaries of teachers in Public Schools, Canada—*Con.*  
ALBERTA—*Concluded.*

	Village Schools							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	685 55	670 41	.....	.....	678 57	590 93	600 00	.....
1906.....	753 00	698 12	.....	.....	611 25	602 25	.....	.....
1907.....	767 00	734 60	.....	685 00	675 55	620 50	.....	700 00
1908.....	778 23	733 86	.....	600 00	782 85	662 35	.....	600 00
1909.....	801 42	811 33	700 00	673 33	743 84	677 55	605 00	690 00
1910.....	829 52	812 52	710 00	810 00	760 00	688 56	690 00	608 57
1911.....	894 40	843 00	718 14	760 00	771 35	735 84	671 87	615 00
1912.....	831 76	815 57	693 12	780 00	791 09	701 16	689 78	691 15
1913.....	982 91	872 20	804 00	700 00	800 64	774 15	742 77	713 33
Per cent increase 1913 over 1905.	43·4	30·1	14·8	2·2	18·0	31·0	23·8	1·9

	Yearly Rural Schools.							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	613 97	602 69	.....	580 00	586 00	562 36	570 00	506 05
1906.....	624 32	610 50	.....	592 25	583 42	588 92	586 66	557 76
1907.....	616 30	598 80	.....	596 00	603 65	596 25	600 00	574 25
1908.....	666 53	621 81	.....	655 23	640 58	612 45	600 00	608 00
1909.....	666 47	656 42	639 16	630 58	624 11	624 71	612 00	604 15
1910.....	690 20	681 13	668 71	631 72	666 83	661 12	647 24	625 19
1911.....	749 32	709 91	700 81	602 72	718 47	684 08	654 05	635 18
1912.....	649 17	687 73	675 40	641 75	676 83	669 23	659 29	635 97
1913.....	784 40	778 16	770 09	744 83	768 53	730 90	728 45	707 60
Per cent increase 1913 over 1905.	27·7	29·1	20·5	28·4	31·1	30·0	27·8	39·8

	In all Schools.							
	Male Teachers.				Female Teachers.			
	First Class.	Second Class.	Third Class.	Permit.	First Class.	Second Class.	Third Class.	Permit.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1905.....	732 09	619 80	660 00	570 00	612 67	572 48	562 50	520 60
1906.....	789 23	638 25	.....	596 83	609 90	585 05	590 00	550 50
1907.....	854 40	656 55	.....	612 45	649 65	591 15	662 50	594 15
1908.....	899 82	676 64	.....	635 00	696 00	631 00	620 00	625 85
1909.....	938 91	708 94	654 07	633 18	706 53	619 23	623 87	602 38
1910.....	992 31	726 15	682 92	659 72	707 84	683 35	659 98	632 02
1911.....	1,028 54	747 92	704 82	675 24	738 19	697 77	673 47	657 95
1912.....	1,013 46	776 49	676 76	663 35	739 13	697 27	669 97	635 19
1913.....	1,172 66	991 06	759 10	727 29	845 79	764 87	729 84	715 06
Per cent increase 1913 over 1905.	60·2	59·9	15·0	27·6	38·0	33·6	29·7	37·3

The table below shows the average annual salary paid to all teachers employed in the province of Alberta from 1905 to 1913.

1905.....	\$599 29	1910.....	\$704 97
1906.....	614 13	1911.....	729 93
1907.....	629 45	1912.....	769 89
1908.....	657 39	1913.....	819 71
1909.....	676 10	Increase per cent.....	36·8

TABLE II.—Average annual salaries of teachers in Public Schools, Canada—Continued.  
BRITISH COLUMBIA.\*

	In Cities and Towns.				In Rural Schools.				Rural Municipalities.				Provincial Teachers.	
	Principals	Assistant principal.	Teachers.		Principals	Assistant principal.	Teachers.		Principals	Assistant principal.	Teachers.		Male.	Female.
			Male.	Female.			Male.	Female.			Male.	Female.		
1901.....	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	59 20	50 64
1902.....													60 80	51 72
1903.....													62 61	52 14
1904.....	92 25	54 00	79 75	53 81	68 33	52 78	57 90	52 07					65 10	52 33
1905.....	94 38	61 95	82 50	58 55	66 15	52 58	57 65	51 46					67 00	54 65
1906.....	92 00	56 82	83 90	54 77	64 85	53 12	55 13	53 00					66 90	53 85
1907.....	97 40	64 63	92 22	59 00	73 33	53 48	59 37	53 08					73 93	55 87
1908.....	107 55	63 50	97 17	61 68	76 50	55 00	60 80	54 43	70 71	53 48	63 43	53 33	76 61	57 95
1909.....	110 36	64 68	99 66	63 00	76 67	56 00	61 38	55 00	73 77	54 38	63 40	54 52	77 31	59 58
1910.....	121 77	63 00	106 90	64 98	83 00	61 60	67 25	61 33	82 10	59 00	70 95	57 83	83 00	63 20
1911.....	125 25	73 11	110 67	71 56	82 65	64 75	70 86	63 90	85 55	62 55	71 00	65 00	85 75	67 85
1912.....	135 55	76 09	117 88	74 58	84 76	69 87	75 36	69 50	98 66	66 00	92 29	74 47	96 65	71 19
1913.....	131 69	77 67	121 82	75 38	92 15	72 78	78 79	72 57	100 61	68 45	100 00	68 17	100 95	72 73
Per cent increase 1913 over '00, '04, '07	42.8	43.8	52.8	40.1	34.9	37.9	36.1	33.6	42.3	28.0	57.7	27.9	70.5	45.6

\* The above figures under each heading represent the average monthly salary.

## APPENDIX No. 8.

## THE COLD STORAGE INDUSTRY IN CANADA.

To the Honourable  
The Minister of Agriculture.

SIR,—I have the honour to submit the following memorandum, with recommendations, on the Cold Storage Industry.

## MEMORANDUM.

The first cold storage warehouse in Canada to be equipped in the modern manner with "mechanical" refrigerating machinery was established in Montreal in 1894. A number of small warehouses, cooled with ice only, were in use previous to that year.

There are at present in operation some 46 public cold storages, with a total refrigerated space approximating 10,000,000 cubic feet. Of this number 27 have received, or are receiving, a subsidy from the Government according to the provisions of the Cold Storage Act. (See list attached.)

In addition to the public cold stores, there are upwards of 50 private establishments with a total capacity of about 8,000,000 cubic feet (partly estimated), controlled by abattoirs, packers and produce dealers, like P. Burns & Co., Calgary, with depots all over Alberta and British Columbia; The Swift Canadian Co., with establishments in Montreal, Toronto, Winnipeg, Edmonton, Calgary and other places; Gunns, Limited; Wm. Davies Co.; Matthews-Laing Co.; Gordon, Ironsides & Fares, and others. Included under this head are several cold stores in the Maritime Provinces and on the Pacific Coast designed for the handling of fish only. Goods are not stored for the public in these places.

Many of the larger meat markets (butcher shops), dairies, provision and fruit stores are also equipped with refrigerating machines, but as a rule the storage space is small and only intended to serve the current needs of the business.

Complete figures are not available but a careful estimate of the refrigerated space used for the storage of food products in Canada, fixes the total at nearly 20,000,000 cubic feet. A single company in Boston, Mass., advertises that it controls 10,000,000 cubic feet of refrigerated space in that city alone.

## KINDS OF GOODS PLACED IN COLD STORAGE.

A complete enumeration of all the different kinds of goods placed in cold storage in this country would make a very lengthy list. The chief articles are: butter, eggs, poultry, fish, meats, lard, fruit, vegetables, nuts, beer, furs, nursery stock, bulbs, cider, etc. Cheese is also an important item in the cold storage industry, but the object of storing cheese is mainly to control the ripening process.

## SEASON OF STORAGE.

Nearly all goods placed in cold storage are of seasonal production. Eggs are stored chiefly during the months of April and May and only to a limited extent during the summer months. Hot weather eggs are not in demand for cold storage purposes. Butter is chiefly stored during the months of June, July and August. Apples are cold stored during the harvest season and are held during the winter months, but the bulk of the apples stored in Canada are still held in what are known as frost-proof ware-

houses, which are not artificially refrigerated. Cold storage is beginning to replace these frost-proof warehouses, which are not artificially refrigerated. Cold storage is beginning to replace these frost-proof warehouses on account of greater efficiency. Citrus fruits and bananas are stored during their season of full supply. Fish are stored largely during the summer and autumn months depending on the locality. Meats are stored at all seasons.

#### PROPORTION OF TOTAL PRODUCTION PLACED IN COLD STORAGE.

There are no accurate statistics bearing upon this point, but in the Government and Legislative investigations which have been held in the United States, it has been shown that the volume of all perishable food products placed in cold storage does not represent more than 10 per cent of the total production of those same products. With a general knowledge of the conditions in both countries rather than with any specific information upon the subject, I would say that the percentage of the total production of food products cold stored in Canada is rather less than it is in the United States.

#### THE REGULATION OF THE COLD STORAGE INDUSTRY.

During the past two or three years there has been considerable agitation over the question of cold storage in the United States with the result that demands have been made for the regulation of the industry by state and federal legislation. So far there has been no federal legislation although two Bills have been introduced in Congress (The Heyburn Bill, Senate, 1911 and the McKellar Bill, House 1913) with that end in view. I believe there is some doubt in the United States whether federal legislation could be applied to the industry except as it enters into interstate commerce. Attached is a tabulated statement showing the main features of the cold storage laws in the different states.

The attacks on the cold storage industry have been directed along two lines: First, that the holding of foods in cold storage for lengthy periods is detrimental to the public health and, second, that the control of large quantities of food products in the hands of cold storage men has enabled them to exact unreasonably high prices from the consumers. These two points of attack have not been kept very distinct and there is a good deal of confusion of thought in connection with the whole subject. There is also, it seems to me, a considerable misconception and lack of distinction between cold storage as such, and cold storage as an instrument used by the middleman to unduly increase his profits in the handling of produce.

Many of the public cold storage warehouses, and especially the larger ones, have no connection with the trading in food products. That is to say, the goods stored are not controlled by the owners of the warehouses.

There are a number of small cold storage warehouses in country districts where the public business alone is not sufficient to support a warehouse. In these cases the only way in which a cold storage can be successfully operated is for the owners to engage in the produce trade and thus utilize the space which is not filled by the public.

#### COLD STORAGE AND ITS EFFECT ON PRICES.

There is a widespread belief that cold storage is responsible to some extent, at least, for the present high cost of certain food products. This point is the subject of much discussion and controversy. No definite proof has ever been adduced in support of the contention. The whole question is very much involved. The same arguments do not apply to foods of seasonal production like butter, eggs, fish, etc., as may be applied to meats which are more regular in supply, and are handled by a relatively small number of establishments. The large abattoir companies and packers, seem to be able to control the trade by driving out the small butcher or dealer, to an extent that does not seem possible with other produce. The "spread" between the price which the farmer



receives for his animals and the price which the consumer pays for meats, is probably greater than in the case of any other staple food product. It may be pertinent to remark also that the large packers and meat companies are notoriously wealthy, while it is a well known fact cold storage as a business has not been unduly profitable, nor is there much evidence to show that the ordinary produce dealer has been taking more than a reasonable toll for the goods which pass through his hands. If there is any menace to the consuming public, even indirectly through cold storage, the operations of these large packers and meat companies would seem to be the most likely place to find it. Publicity as to quantities in store would be a useful check against any unfair dealing on their part, and any regulations which failed to take full cognizance of the packers as an element in the distribution of food products would fail to meet the situation. Most of the packers deal in butter, eggs and poultry in addition to meats, both fresh and cured, and by getting control of the meat trade in a locality they are able to handle the other articles to good advantage. The packers claim to sell meat practically at cost and to make their profits out of the offal, which the small butcher allowed to go to waste. Their methods of distribution are, however, much more expensive than the system which they have to a large extent supplanted, and they are able to make the consumer pay this increased cost by monopolizing the trade more or less.

The mere preservation of foods in cold storage does not appear to be different in principle to the storage of grain in elevators, to the preservation of food in tins, to the holding of apples in frost-proof warehouses, or to any other method of carrying the surplus of food supply from the period of seasonal production for consumption during the non-producing month. The broad fact must be admitted that the cold storage warehouse provides a market at certain seasons for the surplus of eggs, butter, fruits, fish and other provisions which could not otherwise be disposed of. Without the cold storage warehouse the farmer would produce only what he could market during the season of flush production at a remunerative price, and production would be curtailed to that extent. On general principles the cold storage warehouse, by increasing the supply, should have a tendency to lower the prices.

The fixing of the time limit beyond which certain goods may not be held in cold storage and which is a feature of most of the United States laws was intended partly as check against unfair prices, but chiefly, as a concession to the popular clamour for some such action.

If a time limit is made so short that goods cannot be carried from the season of flush production to the time when they are needed on account of the scarcity of current receipts, there would seem to be no doubt but the prices would be raised rather than lowered, because production would be discouraged. No person holding goods in cold storage desires to carry them from one season into another except under very unusual circumstances. In most cases the cost of storage makes it prohibitive.

In 1912 the quantity of eggs in cold storage in Canada was in excess of the demand during the winter months. The result was the prices fell to a point where the dealers are said to have lost money on a large portion of the eggs which were stored. It would seem clear that if there were no supply of cold storage eggs, butter or other produce to draw upon at this season of the year that prices must necessarily be higher than they are. The price of eggs is very high to-day because of an actual scarcity.

The Commission to investigate the question of the cold storage of foods appointed by the Legislature of Massachusetts, reported in January, 1912. This report is generally conceded to be the best general work on the subject so far available. On the question of the influence of cold storage on prices the report reads as follows:—

“With respect to the influence of cold storage on prices, the Commission finds that the effect is to make prices lower and steadier. It is clear that any factor that helps, as does cold storage, to extend the market for certain commodities, by enabling producers and dealers to dispose of their stocks throughout the entire year, instead of being confined to a limited period, must have the effect of encouraging a larger volume of

production. And it is an elementary commonplace of political economy that an increase of supply, other things being equal, leads to reduction of prices. It is equally clear that any agency that operates, as does cold storage, to take goods out of the market in the season of abundance, when prices are low, and to hold them for sale in the season of scarcity, when prices are high, tends, other things being equal, to bring about a greater uniformity of prices, preventing them from alternately falling so low and rising so high as would otherwise be the case."

The policy of the Dominion Government in giving subsidies to cold storage warehouses under certain conditions has had the effect of encouraging the erection of small local warehouses at country points in which food products are stored by a large number of people, and are thus prevented from being accumulated in a few hands in the larger centres.

#### COLD STORAGE AND THE PUBLIC HEALTH.

The cold storage industry is a comparatively new one and many of the first warehouses erected were poorly constructed and were operated by men without any experience of their own or experience of others to draw upon. Insufficient care to see that goods were in proper condition when received and improper methods of handling in store, not infrequently resulted in food products coming out of cold storage in bad condition. This gave rise to more or less prejudice against cold storage goods as such, although it has been the common practice in this country since early days for householders to procure a stock of meats, poultry, etc., in the autumn and keep it in a frozen condition throughout the winter, utilizing exactly the same means for preservation as are employed in the cold storage warehouse. No question was ever raised as to the palatability or wholesomeness of goods so handled.

Great improvements had been made in the cold storage industry and criticisms which were justified in years gone by are not warranted to anything like the same extent at the present time. But the prejudice still exists in many minds, and it is quite a common thing to charge any inferiority found in food to cold storage, although it may never have been near a cold storage warehouse.

There is not very much scientific data on which to base a conclusion with respect to the effect of cold storage on the wholesomeness of different foods. Something has been learned by practical experience, and with regard to eggs and poultry the work done at the Food Research Laboratory of the United States Department of Agriculture, at Philadelphia, is accepted as the best along that line. Dr. Mary E. Pennington, Chief of the Laboratory, in her evidence before the United States Senate Committee on the Heyburn Bill, by which it was proposed to regulate the cold storage industry, said, that poultry may be kept in cold storage for nine to twelve months without developing any condition injurious to the health of the person who eats it, but that after twelve months changes appear to accelerate and that it is not advisable to keep it longer. With respect to eggs, Dr. Pennington gives nine or ten months as the limit during which eggs can be kept without deterioration.

Dr. W. A. Evans, Health Commissioner, Chicago, Ill., giving evidence before the same committee said:—

"I believe that so far as the cold storage proposition is concerned that it is a question of commerce and economy rather than a question of health. I do not believe that the food that is in cold storage and that is put in cold storage in good condition, when it is taken out of cold storage is unwholesome except in rare instances and, therefore, I believe that the proposition is largely a proposition of economy rather than a proposition of health."

The Massachusetts report, already referred to, contains the following paragraph on this point:—

"With respect to the influence of cold storage on health, the Commission finds that in the main it is beneficial. While abuses have arisen, through the holding of



food products in cold storage for unduly long periods and through the handling of goods by improper methods before and after, as well as during, refrigeration, the benefits that have come from the salvage of food through cold storage far outweigh any evils that have developed in this field. Cold storage has brought about an expansion and diversification of the food supply of the population, making certain kinds of food more abundant and more accessible. It thus makes for the conservation of the vital resources of the people. The gain from this source is universal and permanent; the injuries are occasional and temporary, and can be eliminated by proper regulation." (Page 192.)

There does not appear to be any greater need on grounds of public health for regulations covering foods in cold storage, than there is for regulations to deal with these same foods when not in cold storage. The general effect of cold storage is preservation and conservation.

#### THE TIME LIMIT.

A limitation of the storage period has been suggested on the grounds of public health as well as for economical reasons. There is no scientific basis for fixing a time limit. The length of time that goods are in store is one of the least important factors affecting their condition when taken out of cold storage. Eggs which are stored during the cool months of April and May are in better condition in December and January than eggs which are stored in August or September. Cold storage men almost invariably release the later stored eggs first on that account. Butter which is stored during the month of June may easily be in better condition in February than butter which is stored in October or November for the reason that the earlier stored butter has much the better keeping quality. Food which is delayed before being placed in cold storage may have reached a more advanced stage of deterioration than other food of the same kind after six months storage. Dr. Pennington before the Senate Committee on the Heyburn Bill asserted that a chicken would deteriorate more in twenty-four hours at a temperature of 70 degrees than it would in twelve months in cold storage.

#### THE "TAGGING" OR DATING OF GOODS.

The "tagging" of goods in cold storage or the marking of same with the dates of receipt and withdrawal, falls short of the object aimed at unless such marking is carried to the actual consumer. To do so is impracticable with many foods which are retailed in smaller quantities than the storage unit. Further, a large proportion of cold storage foods are consumed in hotels, restaurants and boarding houses. In any case the information which such a provision is intended to convey might easily be misleading for the reason that the time in storage is not a true indication of the condition of any goods. Moreover it would be cumbersome and expensive and therefore add to the cost of cold storage goods. Consumers have a right to know whether the goods they are purchasing have been in cold storage or not, and some provision to inform the public on this point would meet with general approval. The poor qualities of over-held "fresh" food products are very often unfairly attributed to cold storage. Therefore, a similar provision to prevent "fresh" foods from being sold as "cold stored" would be in the interest of all concerned.

There are many points in this memorandum which might have been elaborated at much greater length, but I have deemed it best to be as brief as possible.

#### RECOMMENDATION.

I have the honour to recommend legislation that would give power to the Government to make regulations providing for:—

(1) a definition of the terms "cold storage" and "cold storage warehouse"; (2) a general inspection of all cold storage warehouses; (3) the making of returns at

regular intervals by owners of cold storage warehouses of all classes showing the quantities of certain specified goods in storage, the figures to be published only in total by cities or districts, and (4) the licensing of all cold storage warehouses if considered necessary to secure the enforcement of the laws.

I have the honour to be, sir,

Your obedient servant,

J. A. RUDDICK,

*Dairy and Cold Storage Commissioner.*

Ottawa, December 22, 1913.

PUBLIC COLD STORAGE WAREHOUSES IN CANADA.

	Name.	Total Refrigerated Space.
Subsidized.	The New Brunswick Cold Storage Co., St. John, N.B.....	744,000
	Scott & Hogg, Peterborough, Ont.....	90,000
	The Halifax Cold Storage Co., Port Hawkesbury, N.S.....	75,000
	Cold Storage, Ltd., Woodstock, N.B.....	37,161
	The J. D. Moore Co., St. Mary's, Ont.....	105,000
	Lemon Bros., Owen Sound, Ont.....	33,600
	The Chatham Fruit Growers' Association, Chatham, Ont.....	50,000
	The Palmerston Cold Storage Co., Palmerston, Ont.....	169,984
	Davis & Fraser, Charlottetown, P.E.I.....	150,000
	The B. Wilson Co., Victoria, B.C.....	64,000
	The Trenton Cooperage Mills, Ltd., Trenton, Ont.....	166,446
	The Dominion Fish and Fruit Co., Quebec, P.Q.....	225,000
	The Lockport Cold Storage Co., Lockport, N.S.....	59,940
	St. Lawrence Produce Co., Brockville, Ont.....	106,000
	Flavelles, Ltd., Lindsay, Ont.....	131,510
	Gunns, Ltd., Harriston, Ont.....	57,069
	Campbell & Hamilton, Calgary, Alta.....	111,050
	The St. Thomas Cold Storage Co., St. Thomas, Ont.....	174,141
	The Brandon Creamery and Supply Co., Brandon, Man.....	27,500
	O'Keefe & Drew Abattoir Co., Chatham, Ont.....	144,400
	The Canadian Fish & Cold Storage Co., Prince Rupert, B.C.....	781,000
	Moosejaw Cold Storage Co., Moosejaw, Sask.....	189,764
	J. H. Sansregret, Joliette, Que.....	23,394
	City Cold Storage Co., Regina, Sask.....	100,672
	The Brantford Cold Storage Co., Brantford, Ont.....	36,000
	The White Packing Co., Mitchell, Ont.....	30,600
	Algoma Produce Co., Sault Ste. Marie, Ont.....	55,806
	Ottawa Cold Stores, Ottawa, Ont.....	94,000
	Manning Cold Storage Co., Toronto, Ont.....	290,038
	The London Cold Storage & Warehousing Co., Ltd., London, Ont.....	322,000
	Canso Cold Storage Co., Ltd., Canso, N.S.....	40,000
	The Halifax Cold Storage Co., Ltd., Halifax, N.S.....	75,000
	J. B. Jackson, Simcoe, Ont.....	36,000
	St. Catharines Cold Storage Co., St. Catharines, Ont.....	28,000
	McDougal Bros., Owen Sound, Ont.....	66,400
	Pacific Cold Storage, Dawson, Y.T.....	45,000
	The Gould Cold Storage Co., Montreal, Que.....	750,000
	Canada Cold Storage Co., Ltd., Montreal, Que.....	762,307
	A. A. Ayer & Co., Ltd., Montreal, Que.....	700,000
	Gunn, Langlois & Co., Montreal, Que.....	405,000
	Lovell & Christmas, Montreal, Que.....	475,000
	Manitoba Cold Storage Co., Winnipeg, Man.....	800,000
	Vancouver Ice & Cold Storage Co., Vancouver, B.C.....	700,000
	The British Columbia Cold Storage Co., Victoria, B.C.....	35,000
	Alex. Ames & Sons, Sherbrooke, Que.....	110,595
		<hr/> 9,672,977 <hr/>

## SUMMARY OF STATE LAWS RELATING TO COLD STORAGE.

*(California.)*

Date and Scope of Act.	Time Limit.	Marking.	Reports.
Includes fresh meat and fresh meat products; fish, game, poultry, eggs and butter.	12 months. May be extended by State Board of Health.	Food or container to be marked with date of receipt and withdrawal.	Quarterly to State Board of Health, or more frequently if Board of Health requires.

*(Delaware.)*

Effective April 19, 1911. Includes fruits and fish excepted.	6 months. May be extended to 8 months by State or local Board of Health.	Food or package containing it to be marked with day, month of year of receipt.	Quarterly to State Board of Health.
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*(Indiana.)*

March 2, 1911. All food products. Warehouse defined as "one employing refrigerating or ice machinery for the purpose of refrigeration, whether for public or private use."	9 months; also all food products now in cold storage to be removed and placed on market within 9 months from passage of Act.	Product itself or original package to be marked with date when placed in storage and date when removed; sale of products coming from outside State prohibited, unless previously marked as provided in Act.	Records of receipts and withdrawals to be kept but reports not required.
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*(Iowa.)*

Effective July 4, 1913. Includes fresh meat and fresh meat products, fresh fruit, fish, game, poultry, eggs, butter and other food products.	12 months. May be extended by State Dairy and Food Commissioner if foods are still in good condition.	Food or container to be marked with date of receipt and withdrawal.	Quarterly to State Dairy and Food Commissioner or more frequently if Commissioner requires it.
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*(Louisiana.)*

Effective July 1, 1913. Includes fresh meat and fresh meat products, fish, game, poultry, eggs and butter.	12 months. May be extended by State Food Commissioner if foods still in good condition.	Food or container to be marked with date of receipt and withdrawal.	Quarterly to State Board of Health or more frequently if State Food Commissioner requires.
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*(Massachusetts.)*

Approved May 27, effective Sept. 1, 1912. Includes fresh meat and fresh meat products, fresh fish, poultry eggs and butter.	12 months. May be extended by State Board of Health, if foods still in good condition.	Articles of food except fish, or container, to be marked with date of receipt.	Quarterly to State Board of Health, or more frequently if Board requires.
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## SUMMARY OF STATE LAWS RELATING TO COLD STORAGE—Continued,

(Nebraska.)

Date and Scope of Act.	Time Limit.	Marking.	Reports.
Effective July 1, 1913. Includes all articles used for food, drink, confection or condiment whether simple mixed or compound.	12 months. May be extended by Food, Drug and Dairy Commissioner if foods still in good condition.	Food placed in storage must be packed in containers marked with serial lot number. When food is withdrawn, the container must be marked with date of entry and withdrawal. Goods withdrawn for shipment outside State need not be so marked.	Quarterly to Food, Drug and Dairy Commissioner, or more frequently if Commissioner requires.

(New Jersey.)

Effective April 21, 1911. All articles used for food, except liquid food.	10 months. May be extended by State Board of Health.	Food or package containing it to be marked with day, month and year of receipt. Receipt of goods kept in cold storage outside State prohibited unless previously marked as provided in Act, except with consent of State Board of Health.	Quarterly to State Board of Health.
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(New York.)

Approved June 15, 1911. Amended by 1913 Legislature to take effect Oct. 1, 1913. Includes all articles of food except nuts, fruit, cheese or vegetables.	10 months. 12 months for butter.....	Food or container to be marked with date of receipt and withdrawal.	Three reports annually to State Department of health.
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(North Dakota.)

Approved March 12, 1913. Includes fresh meat and fresh meat products, fresh fish, game, poultry, eggs and butter.	12 months. May be extended by Food Commissioner.	Food or container to be marked with date of receipt & withdrawal.	Quarterly to Food Commissioner, or more frequently if required.
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(Pennsylvania.)

Approved May 16, 1913. Effective 90 days from passage. Fresh meats, fowl fish, eggs and butter.....	Beef, 4 months. Pork, sheep, lamb, 6 months. Veal, 3 months. Fowl, drawn, 5 months; undrawn 10 months. Eggs, 8 months. Butter 9 months. Fish 9 months.	Food or container to be marked with date of receipt and withdrawal. Sale of food kept in cold storage outside of State prohibited if held for more than time limit or unless marked as required.	Quarterly to Dairy and Food Commissioner or more frequently if required by such officer.
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## APPENDIX No. 9.

## MEMORANDUM ON COLD STORAGE.

By W. R. INGRAM, of the Swift Canadian Co., Winnipeg.

The use of cold storage in the preservation of various kinds of food products, which has been developed greatly in recent years, has been connected in the popular mind with the recent advance in prices. The business has been subjected to violent abuse in many quarters, and has been made a scapegoat for the public excitement aroused by the increased cost of living. Some States have made drastic regulations for the prohibition of cold storage, except along certain lines, and numerous Bills have been presented from time to time, some having been very radical and others are fair to the industry.

Hon. James Wilson, Secretary of Agriculture of President Taft's cabinet, made a statement, "that cold storage is a great blessing to humanity. It is a great blessing to be able to put meats, vegetables, fruits, etc., in cold storage where they are kept." He also stated, "that if we had no cold storage and could not keep meat at all that way, it would tend to raise the price because there would be no way of doing it except keeping the animals alive."

It is only a sane and feasible proposition that since cattle are at their best from the slaughtering standpoint in the fall months of the year, after having been on grass all summer, that that is the time to kill them, and not hold them to grow thin again preparatory to refatten them later in the winter and in the early spring by use of grains. This is a very expensive proposition. The time to slaughter cattle is when they are ripe, and those that have come from the ranges and from grass are always ripe in the fall of the year. They are slaughtered and put in cold storage, losing very little by shrinkage and are in prime condition as cold storage product to be sold to the trade up until the time when grass-cattle begin to come again. The cold storage process is simply the application on a large scale of the principle of food preservation, as used in the cellar of the farm, or the ice chest at home.

Mr. C. H. Utley, President of the Quincy Cold Storage Company, made the following statement before the Senate Committee.

"It simply means that the storage covers the best means known at the present time for preserving perishable foods from the time of their great abundance to their time of scarcity. That principle seems to me to be so plainly desirable that it is hardly open to contradiction or the need of any argument. It is the same principle that enters into the nature of the squirrel in storing up a little horde of nuts from the time he has an opportunity of getting them to the time of scarcity. It is the same principle that the farmer uses in putting his hay into his barn and feeding it out to his cattle when it is scarce, and grain also. There is nothing different in the fundamental principle of cold storage from the fundamental principle involved in the storage of any article. That is, warehouses are built with the best facilities for the storage of cotton, for grain, for wool, for groceries, and other articles, and a cold storage house is simply built in the best way possible for the preservation of the perishable articles.

"Before cold storage facilities were available, during the time of plenty prices were extremely low for the producer. Conversely, during the season of scarcity, prices rose rapidly and were extremely high to the consumer. Many classes of perishable products were not procurable even at the extreme prices. The cold storage warehouse



acts as a balance. It insures that a fair supply of the products of plenty, produced in their seasons, shall be available throughout the year. It materially lessens the extreme between the former minimum and maximum selling prices, which is a decided advantage to both producer and consumer."

Also, Frank G. Urner, cold storage expert, reported before the same committee as follows:—

"It is evident that if there are no means of preservation of a commodity beyond the limited period of its production, so that all the product must be consumed within that period, the production of that commodity will, so far as inevitable variations permit, be limited to the amount that can be so disposed of at a price high enough to yield an average profit to the producer and to necessary distributing agencies. It is equally evident that if means of preservation of surplus are available, so that the commodity may be sold to satisfy an effectual demand during a longer period, a larger quantity may be profitably produced, thus adding to the total food supply. Under natural conditions of trade the tendency is therefore to increase production to the limit of quantity that can be profitably sold, not only during the season of over-production—or greatest production—but during the entire period of production and possible preservation.

"If this season of practical preservation extends to the following season of flush production then it follows that the opportunity for profitable production has reached its maximum and the tendency will be to produce the maximum quantity that can be consumed during the period at the lowest average price that will induce production. Considering these facts, it is quite evident that after the scale of production of a perishable article has been built up to a volume requiring a full year for its consumption at profitable prices, because of the development of facilities for preservation during that period, any restriction of these facilities, by forcing the sale of the entire product during the shorter period, would first result in a lower price to producers during the season of flush production, and a higher price or an entire lack of offerings during the period of restriction; but second in a decrease of production to the quantity that could profitably be sold during the season of greatest production and restricted preservation."

Dr. M. E. Pennington, Chief of Food Research Laboratory, Department of Agriculture, Washington, made the following statement, which is very interesting, particularly in view of the fact that Miss Pennington has spent a great many years in making tests on cold storage products:

"Cold-storage foods are sold as 'cold stored' through every branch of the industry. The retailer when the ultimate consumer is to be served, is apt to call all high-class goods 'strictly fresh,' regardless of past history; ordinary goods are 'fresh' and the low grade stuff is apt to be apologized for as 'cold storage,' though in a large percentage of cases it has never been in a cold-storage warehouse.

"Such statements by the retailer have created an unfounded prejudice in the mind of the public—bad for the public, but good for the retailer's pocket-book. The public knows so little about seasonal production that it is easily fooled. For example, the housewife insistently demands fresh broiling chickens when there are none on the market. Therefore, the retailer is more apt to give her very good storage stock and assure her that it is fresh. If the stock is good he is ordinarily perfectly satisfied that he has told the truth.

"Eggs follow the same rule. There are times during the year when only the small inner circle can be supplied with fresh eggs. The great majority of people who live on moderate or even more than moderate incomes will be given high-grade storage eggs, because they are really the best that the market affords. But the popular prejudice against cold storage and ignorance in regard to seasonal food supply, is so great that the retailer falls back upon falsehood in order to supply his trade with the goods they really want."



In speaking about cold storage advancing the value of articles, Mr. Carlton D. Prankard, of New York city, President of the New York Wholesale Fish Dealers' Association, made the following statement:—

"No, I don't think that; I don't think there are any victims of cold storage; I do not think cold storage ever has enhanced the value of an article beyond the ordinary carrying charge. The merchants who put their goods in cold storage are satisfied with a very small return on their investment. There is absolutely no competition among the fish interests, and each man, each dealer, who puts his fish in does so as a matter of private speculation and to take care of the trade who look to him for a supply."

### *Inspection.*

Clause 8 of the Meat and Canned Food Act as amended May 4, 1910, reads as follows:—

"The inspector may at any time reinspect a carcass or any portion or product thereof, in order to ascertain whether subsequently to the first inspection thereof, it has undergone decomposition, or has otherwise deteriorated, or has been tampered with or adulterated by the use of preservatives or otherwise."

Clause 9 of the same Act reads as follows:—

"Every carcass, or portion or product thereof, found upon inspection or re-inspection, to be unhealthy or unfit for food, or which contains such ingredients or preservatives as may render it unfit for food, shall be marked by the inspector in such manner as is provided by the regulations, and shall thereupon be deemed to be condemned as unfit for food and shall be disposed of as provided by the regulations."

By extending the jurisdiction of the Act to include cold storage warehouses as well as the regular inspected establishments there would be no discrimination. Meats killed locally and placed in cold storage plants which bear no regular inspection would then have to be passed upon by Government inspectors.

A Dominion cold storage Act would only cover intra-state product, while the majority of the cold storage warehouses would be doing business strictly local to the provinces in which they were located.

So far as Swift Canadian Company is concerned we do not object to Government inspection of our cold storage houses as to sanitary condition of the premises, or of the goods received and stored therein.

We agree fully with the stand taken by Mr. Ruddick of Ottawa, that:—

"Suggestions to limit the period of storage ignore the fact that the condition of the goods when placed in storage is of infinitely greater importance than the length of the storage."

### *Time Limit.*

Taking it for granted that the newspaper reports are truly outlining the new cold storage law for Canada, and that this law will be patterned after the Pennsylvania Act:—

In the first place the time limit is too short to benefit any one and is made merely of arbitrary provisions without having any merit except in one instance that it admits the keeping qualities of undrawn poultry as being better than drawn.

Time, instead of being the all-important factor, is one of the least important in connection with the storage of food.

Long before foodstuffs deteriorate, they are disposed of by economic necessity. It does not pay the owner or warehouseman to attempt to carry goods beyond the period of scarcity, which they were stored to provide for.

There is nothing from a pathological standpoint which required a time limit on goods. There is, however, some economic reason for forbidding the storage of food-

stuffs longer than the next season of plenty; that is, from season to season, usually one year, and one year is probably the correct time limit to place upon carcasses of beef, mutton, lamb, pork, eggs, butter and also fish, because they are all kept below the freezing point.

The Department of Agriculture through their research department made numerous tests chemically and otherwise upon the time limit and the result of holding for one year was satisfactory.

The Pennsylvania law was framed on theory, not facts.

All tests made have proved conclusively the fact that cold storage meats, etc., are free from deterioration at the end of twelve months.

Cold storage should not be blamed for the result of inadequate local inspection of markets and retail places in general. The Cold Storage Investigating Committee of the Chicago Chamber of Commerce, after one of the most thorough and complete investigations ever made on the subject recommended:—

“This in our judgment should be one year on butter, poultry and fish and not to exceed ten months on eggs. At the expiration of the time limit, an inspection of the food products should be made by a Government officer; and if found wholesome, a permit might be issued allowing the articles to remain in storage for a further time.

“Ill advised legislation based on prejudice and superficial information cannot but result in a crippling of the industry, which of itself must necessarily cause an increase in the price of those food products which are practically the necessities of life.”

The new cold storage law of Nebraska, which went into effect July 17, is being enforced by the Food, Drug, Dairy and Oil Commission. Among other things it provides that “no person, firm or corporation, as owners or having control, shall keep in cold storage any article of food for a longer period than twelve calendar months, except with the consent of the Food, Drug and Dairy Commissioners, except as hereinafter provided. The Commissioner may, upon application, grant permission to extend the period of storage beyond twelve months for a particular consignment of foods, if the foods in question are found, upon examination, to be in proper condition for further storage at the end of twelve months.” The Pennsylvania law allows fish to be held in cold storage only nine months. It is a pity that the legislation of the various states is not more uniform. If the association now working for uniform food laws accomplishes its purpose, a vast deal of good to the consumer will result, and a great amount of hardship to the handlers of food products will be removed.

The *Ice and Refrigeration*, published by Nickerson & Collins Co., Chicago and New York, report in their paper of January, 1914, as follows:—

“A number of states have adopted the so-called model Bill prepared by the Association of State and National Food and Dairy Departments. This is an excellent measure, if some legislation is inevitable. The chief objection to this proposal is that too much power is conferred upon the state officials in making regulations, which destroys the principle of uniformity and opens the door to dangerous requirements. This Bill defines cold storage in the usual way and imposes a limit of twelve months on meats, fish, game, poultry, eggs and butter, with privilege of extension on particular consignments of goods. It provides for licensing, dating in and out, supervisory inspection, quarterly reports, sale under proper sign and prohibits re-storage after placing on sale to consumers. The great value of this measure is the fact that state and national officials, familiar with conditions recommend it rather than the more drastic legislation proposed. Within the past few weeks and now as this report is being prepared, a new attack is being made on the cold storage industry, based on the prevailing high retail price of eggs. This renewed agitation is another outbreak of an epidemic of popular prejudice and misunderstanding of the subject, based on absolute fallacy, fanned by the well-meaning but misguided activity of the housewives

leagues, promoted by perverted and snap newspaper opinion and exploited by politicians, who rush in with legislative remedies regardless of established fact and scientific investigations. It is a source of great satisfaction that a mass of evidence and experimental knowledge has been acquired, especially by the United States Department of Agriculture and in the investigations of various commissions and public hearings, so that when the present storm of unreasoning criticism has spent itself, the economic position and function of our business will be even more firmly established than ever. Any one familiar with the evidence available, will have no doubt of our ability to meet and convincingly satisfy any honest and thorough inquiry of the subject that may be instituted."

### *Marking.*

The *Fishing Gazette* says in a recent issue:—

"The wholesale fish merchants of Philadelphia are up in arms over the provisions of the new cold storage Bill which provides for the stamping by the retailers of each package of fish sold, be it large or small with the date when placed in and taken out of cold storage. This would entail an endless amount of useless labour and expense, and is absurd on the face of it, and aptly illustrates the idiotic measures introduced by up-state legislators about matters they are entirely unfamiliar with. We predict when the suit is brought to trial the court will speedily recognize the injustice of the Bill and its effects, and comply with the request for an injunction restraining the defendants from enforcing its objectionable provisions."

One principal objection to marking or dating product is the fact that it will immediately arouse suspicion of the purchaser. For instance, when a consumer goes to a store and buys a piece of bacon which bears a date thirty days back and also gets a ham bearing a date sixty days back of that or ninety days altogether, there will be serious doubt in his mind.

Mr. Morrell, of Ottumwa, Ia., in explaining the situation spoke as follows at the Senate investigation in 1910:—

"We have two seasons of supply. Our cold storage facilities enable us to take in those hogs during the season of large supply and put away in cold storage. The season of heavy runs for hogs is not the same as active demand for the product.

"Now take breakfast bacon—the season for greatest demand is September, October and November—the hog receipts are not in keeping with the demand and consequently we have in our store the surplus we received during May and June."

Statement of Jno. S. Munce of Indianapolis, before the same committee:—

"Complete confusion would exist in the mind of the buyer. One man would say 'I won't eat meat that is over thirty days old' and another would say 'I will not eat it unless it is ninety days old.'"

Statement by Charles H. Utley of Boston, before the same committee:—

"Presumably the object of labelling articles in cold storage is to give the consumer information as to the age of the article. Information as to the length of time the article has been in cold storage by no means gives this information, as considerable time might elapse between the time of production and the time when goods went into cold storage or considerable time between date of going out of cold storage and into consumption."

Victor H. Becker, of Chicago, a refrigerator engineer, went on record as follows:—

"The best way to protect the consumer is by inspection of the retailers' stands."

F. G. Urner, Vice-President of New York Mercantile Exchange in speaking before the Senate Committee said:—



"Even if labelling food with a statement of the period of its storage were sufficiently useful to warrant the labour and expense of labelling, this usefulness would depend entirely upon the ability to carry to the actual consumer the information contained on the labels. The branding of wholesale containers in which alone goods are handled in interstate commerce, would not accomplish this, because in a majority of cases wholesale packages are broken up and their contents graded and re-packed by intermediate handlers for retail disposition."

The information given by Mr. Frank Harvey Field of New York City in reference to marking of fish, shows that this would be a very difficult proposition. He spoke as follows:—

"This practice of tagging fish was started at one time in New York City but was discontinued on instructions from the Board of Aldermen, owing to the fact that it was found to be absolutely impossible.

"There are some fish that are very small. Take white bait; it takes several hundred of them to make a pound; they are usually served on a piece of toast, and you eat them heads and tails and bones and insides and everything. It is impossible even to clean them. Now what is true of white bait is true in some degrees of such fish as smelts, ciscos, blue pike, and other small varieties of fish. Take any fish under a pound; now you take a very small fish of that kind, and if you attempt to tag it in any way you are going to largely increase the cost."

Now so far as the Swift Canadian Co are concerned, we think it would be a serious error to attempt to date goods because in the first place it would be impracticable. So much goods is shipped in bulk and so many different assortments go in one small box of say 50 pounds, that it would be an endless expense and handicap to the business. Also when the butcher goes to sell the goods you could not confine him to the original package, because there might be an assortment of different kinds of goods that would have to have different kinds of treatment in his store; for instance, they would have to be separated and sent to the various departments for which they were intended.

#### *Butter and Eggs.*

The Chicago Butter and Egg Board of Chicago, Ill., issued a short time back a booklet "A few facts about Cold Storage." A few paragraphs will be particularly interesting.

"In these days of agitation against high prices of food products, the cold storage warehouses are often blamed for existing conditions, but that they are really a blessing instead of a curse to the consumer is very apparent when one is made acquainted with the actual facts in the case.

"The rates of storage are uniform to all. No distinction whatever is made and anyone who wishes to do so, has the privilege to buy and store during the season of plenty that he may sell or consume in the time of scarcity. Everyone, therefore, is given an opportunity to deal in perishable products and a trust under these conditions becomes impossible.

"Cold storage houses have become a veritable necessity to mankind, as they absorb large quantities of the finest perishable products in the season of plenty, when production is heaviest, to take care of the consuming demand in the time of lightest or no production, thereby maintaining to the producer a fair price for his output during the flush, and preserving to the average consumer many of the necessities of the table at a season when the fresh article would be absolutely beyond the reach of his purse, if indeed at all obtainable.

"In the days before storage houses were in existence, the price of eggs in the flush of the season often was as low to the farmer or producer, as 5 cents to 6 cents per dozen, while in the winter months 50 cents to 60 cents per dozen wholesale was not at all unusual.

"Under the same conditions to-day, the farmer with his high priced land and general prosperity, would not bother to raise poultry, unless assured a fair price in the season of plenty.

"Of all the butter produced in the country, not over 6 per cent is put away into storage, while 94 per cent goes into immediate use.

"Getting down to the fresh meat problem, we find that over 97 per cent of the product is for prompt use and that less than 3 per cent is placed in storage. While as to poultry, it is difficult to arrive at actual figures, yet, the best posted men put the holdings on about the same basis as meats.

"It is certain that fair prices must be maintained in the season of greatest production or else there would be no inducement for the producer to continue in the business, and it is equally certain that unless we had some extra stocks to draw upon in the time of highest production, the average consumer would have to go without table necessities; therefore, the cold storage house is an absolute necessity, stands as the leveler of prices the year through and makes for a fair deal to both producer and consumer."

Victor H. Becker, of Chicago, made the following statement before the Senate Investigating Committee relative to butter:—

"Most of the long storage butter goes into the cooler in May, June and July, when the cows are fresh and they have plenty of fresh young grass. This results not alone in a largely increased production of cream and butter fat, but in yield of butter of the very best quality. The production during these months is greatly in excess of market needs. The long-term storage butter is held at a temperature of zero or 5 degrees below, and this 'June' butter is of much better quality than freshly made butter."

Mr. Brownell, a prominent cold storage man of Washington Court House, Ohio, also testified at the same committee meeting that butter remaining in his cold storage warehouse for a year or more would come out in excellent shape and had not deteriorated at all.

Mr. Frank D. Mack, of New York city, cold storage engineer, advised at the same meeting that he had known butter to keep from two to three or four years in cold storage warehouses without any harm whatsoever.

Considering the fact that the majority of the butter goes into cold storage in the months of May, June, and July, and that it has to be carried in order to take care of the shortages existing during the winter and early spring months, a period of twelve (12) months is absolutely necessary in order to guarantee sufficient butter at fair prices for the year round.

Mr. Albert M. Read, of Washington, D.C., secretary of the American Warehousemen's Association, stated that the commercial usage of eggs is from April to February.

Mr. Fitz-Randolph, Chief of the Division of Foods and Drugs of the State Board of Health of Trenton, N.J., made the following statement:—

"We are now investigating in the laboratory some eggs that have been stored for fourteen months which were stored on the day they were laid,—perfectly fresh, good eggs. They are now in a condition which I could call good. Very edible. Their flavour is fairly good. They are not to be compared in quality with strictly fresh eggs, and they show certain changes. They are superior in quality, I should say, to the ordinary fresh farmers egg of warm weather. That is, an egg which has been gathered up by the farmer after lying around for three or four days exposed to high temperature and sent into market in the ordinary manner in which those people market those eggs."

Mr. W. G. Campbell, Chief Inspector of Department of Agriculture, referred to eggs in shell as follows:—

"They begin to arrive the latter part of March and continue until July. They begin to move in October and continue to be withdrawn in increasing amounts until

January. The stocks are usually depleted in March of the succeeding year, so that in no instance did our inspectors locate any shell eggs which had been in storage over one year. All of the storage houses place their eggs in rooms set aside for this particular purpose, which are kept as dry as possible, as very little moisture will be sufficient to cause eggs to mold or rot. All eggs lose weight through storage."

Mr. Victor H. Becker, refrigerating engineer of Chicago, some thirty years' experience, made the following report to the Senate Investigating Committee:—

"The cold-storage supply is drawn upon whenever the supply of fresh eggs falls below the market demand. Even in August, September, and every month thereafter eggs are withdrawn from cold storage. The largest number go out in December. January usually cleans out cold-storage eggs, as fresh southern eggs then begin to arrive in considerable quantity and the market price begins to fall below the point where profit is possible in cold-storage eggs.

"Some eggs are placed in cold storage during the summer months or at any time when the current receipts exceed the demand. These hot-weather eggs being weaker and usually less 'fresh' than the April eggs are much more apt to go wrong in cold storage inside of three months than is the April egg in nine to ten months, as every cold-storage man and egg dealer knows."

Eggs put in storage in April would have to be sold out not later than November, which would be quite a detriment to our business. In fact the April eggs are the best quality of eggs, which we put away and naturally hold the longest. It would mean that we would have to clean up our April eggs before our June and as our June eggs are cleaned up first, which is generally the month of October, you can see that it would mean considerable loss to us to carry them into January and February. The production is lighter in June and there would not be enough June eggs available to protect our January and February business, therefore the country would possibly be out of eggs these two months were this law put into effect. The writer recommends a limit of ten months on eggs; ten months on poultry is satisfactory, and as we handle very little drawn stock five months would not effect us a great deal, but would be a disadvantage to us on all that we handle as young chickens would not be available after December and it would mean that in June and July there would be very little or no stock available.

Nine months on butter is entirely too short. Heavy production is in June and July, and it is necessary that we store butter in these two months to take care of our February and March business. The production in this country is practically nothing during the winter months. We would recommend 10 to 11 months on butter. Good June butter put in storage under proper conditions comes out in as good condition in February as it does in November.

Due to the fact that fairly cold weather exists during the months of December, January, February and part of March it would be very dangerous to ship eggs and cheese on account of possibility of freezing. The frozen condition of the country retards the production of eggs and cream to such an extent that there is very little if any fresh stock available. These commodities in this country are put in storage in more favourable conditions than in Pennsylvania, due to the cooler weather during the season of production, which would warrant their being carried longer as their keeping qualities are much better.

Taking the bill as a whole, we feel that the country would be put to great disadvantage if any other than those time limits recommended by the writer are put in force. It would cause a general shortage of food which would result in very high prices during the months of non-production so that the consuming public of poor means would be placed at a very great disadvantage.



*Meats.*

The holding of meats in cold storage is caused very largely from the fact that the greatest run of cattle coming in from ranges is during the fall months of the year. These are killed and held in storage until such time as they are needed up to the following May or June, when the grass cattle begin to come on the market again.

Albert M. Read of Washington, D.C., Secretary of the American Warehousemen's Association, stated that meat frequently held six months or longer in their cold storage warehouses has no ill effects.

Sulzberger and Sons Co., of Chicago, report to the same committee covering meats placed in cold storage. They state that the length of time these remain depends entirely upon the market. Beef is usually placed in cold storage in the fall, when the grass cattle come in and beef is cheap, and is taken out during the winter or spring months when none of this class of cattle is available. In any case, it will be taken from the freezer before the next fall or grass cattle season.

G. H. Hammond Company made a statement before the same Committee as follows:

"In our opinion frozen meats are not injured in the least as to their healthful and nutritive qualities. We consider a year to 15 months a reasonable time to hold meats in freezer, if strictly fresh when frozen."

The Cudahy Packing Company, of South Omaha, one of the largest packers in the States, made the following report:—

"As regards the effect of cold storage, according to our experience, will state that we believe meats can be frozen and kept indefinitely without deterioration and consumed without detriment, provided that after leaving cold storage they receive ordinary handling at the usual temperatures for handling fresh meats and are consumed within approximately the same time as fresh meat after removal from chill rooms. However, as regards such frozen meats which have once been thawed, there might be some question as to their deterioration if they should again be returned into the freezer. This is never done by our company, and we believe is rare in the trade."

Believe that if such a law is put into effect in Western Canada it will greatly effect the beef, veal, sheep, and lamb business during the winter months, not only from the standpoint of the packers but from the consumers' standpoint as well. You probably know that we receive in our local stock yards sufficient live stock to take care of our entire requirements during only three to four months of the year. In fact, during these months we receive more than we require for current business, therefore, we arrange to freeze our surplus to take care of our orders during the scarce time.

We usually start freezing cattle about September and this continues until probably the middle of December. The beef we put into storage we begin to apply on orders the latter part of December, and continue to do so until about the first of July.

It is to be remembered that we do not put beef away in the freezer entirely for gain: it is largely a matter of protection. If we did not have this frozen beef to ship out during the first six months of the year it would be impossible for us to anywhere near take care of our orders.

*Poultry.*

W. G. Campbell, Chief Inspector of the Department of Agriculture, Washington, reports that:—

"It appears that poultry deteriorates rapidly if improperly packed," and that he believed that poultry should not be stored for a longer period than one year, as there is an undoubted loss in weight and drying of tissue.

Mr. Becker, refrigerator engineer of Chicago, speaking before the Senate Investigating Committee, stated that poultry would remain in excellent shape to a year or a

year and a half without deterioration. This gentleman spent some thirty years as a refrigerator expert, and seems fully qualified to speak upon the subject.

The experience of our Company has been that poultry remains in excellent shape with no perceptible deterioration at all at the expiration of a year. Therefore, it seems only reasonable that in applying the twelve months' limit on poultry that it would be a reasonable proposition, especially so in view of the fact that it would allow the carrying over from the fall of one year to the fall of the following year if absolutely necessary.

As is generally known, the poultry season is heaviest in the fall of the year, consumption of the birds being made all during the year.

### *Fish.*

The *Ottawa Weekly Journal*, December 19, 1913, reads as follows:—

"George H. Bradbury, Conservative member for Selkirk, Man., will introduce a Bill into parliament at the very earliest opportunity when the House opens in January, which is designed to put in operation a system of cold-storage inspection. It will probably be amalgamated with the Government's cold-storage measure.

"Talking with the *Journal* to-day about the proposed legislation, Mr. Bradbury, who has just returned from the West where he was campaigning in McDonald, said his Bill was based largely on legislation which had gone into effect in the United States, as well as other Bills which are before other state legislatures. He has picked from each what he considers best.

"The feature of the Bill will be the clause which absolutely prohibits the placing of fish in cold storage. 'Fish should not be frozen,' says Mr. Bradbury, 'when it is frozen it is apt to be poisonous.'

"The general effect of the Bill will be to date all goods placed in cold storage to record the amounts of all classes of produce and so prevent the hoarding of food in order to raise prices."

The *Journal* goes further and states the Bill will be based largely on the new Act recently put in effect in Pennsylvania. As this Bill is patterned largely after legislation enacted in the United States, it is considered advisable to refer to certain investigations, which have been made in the United States, and also in other countries tending to show that fish if properly handled do not become poisonous from freezing.

Further it might also be mentioned that the Pennsylvania Act, radical as it is, allows a limit of nine months or within one month, of undrawn fowl, which is the longest period allowed in the Act.

Dr. P. G. Heineman, University of Chicago, in his article August, 1912, in the *Popular Science Monthly*, says:—

"The handling of fish for cold storage is surrounded with difficulties. Fish is not part of our daily diet as meat is, but is consumed largely on one day of the week. The fisherman may have a large haul or a small haul. If large, there will be a surplus to be disposed of. A number of fish are frozen together, forming cakes of about 20 pounds each. The cakes are piled up on top of each other in a cold storage warehouse. The ice hermetically seals the fish, but every well regulated cold storage warehouse has some provision for ventilation and moving air takes up the evaporating ice from the free parts of the cakes containing the frozen fish. The heads become exposed, and are re-covered with ice by periodical sprinkling and dipping. This will preserve fish for long periods. Thus, waste is prevented and the market kept supplied."

The report of the Cold Storage Investigating Committee of the Chicago Association of Commerce regarding fish is very interesting.

The Cold Storage Investigating Committee composed of:—

Dr. Arthur R. Reynolds, Ex-Commissioner of Health; Mr. Wm. S. Kies, Corpora-

tion Lawyer; Mr. Marvin A. Farr, Chairman, Chicago Real Estate Board; Mr. C. D. Loper, Secretary, Mullen & Co., Wholesale Woollens; Mr. Edward Clifford, Manager, Hornblower & Weeks, was appointed late in the year of 1911, with instructions to thoroughly investigate the cold storage industry as carried on, not only in Chicago, but all over the world.

Their report reads:—

“No fish go into cold storage during the first four months of the year. During October and November is the principal season for putting fish in storage for the winter months, the lean season in the production of fresh fish. When the winter is mild more fresh fish are produced and naturally reduces the demand for storage fish. In such seasons, there is liable to be fish held in storage until the next winter. Fresh water fish are chiefly caught in the waters of the Great Lakes and such lakes in the Canadian Northwest as Lake of the Woods and Lake Winnipeg. They are immediately put into boxes and surrounded by crushed ice, then removed to the refrigeration room of a steam barge, brought to shore and shipped on ice in refrigerator cars to the storage centers or centers of distribution. No criticism can be made of the handling of fish in this manner. Those peripatetic fishermen who fish in the streams and small lakes of the country and who have meagre facilities for icing in the summer time, send to the market fish in poor condition as a rule, although there doubtless are exceptions. The sooner a fish is cooked and eaten after it comes out of the water the better. If fish are promptly frozen, they will keep for a year and even two years remarkably well. They do not dry out in storage as readily as poultry. Fish should be delivered to the consumer iced or frozen in all seasons. Fish that are right when they go into storage will come out good. If they are handled properly by the retailer the consumer cannot tell the difference between fresh and storage fish when it comes upon his table. There seems to be greater risk of getting a poor fish by ordering a fresh fish than there is when ordering a frozen fish.

“Your committee finds at the outset that there is an unreasonable prejudice on the part of the public towards food products which have been in cold storage. This prejudice in many instances is unfounded; and in others, responsibility for such prejudice is traceable directly to the retailer who sells food products unfit for consumption, many of which have never been in cold storage. The consumer finding the product tainted and unfit for use readily denominates the article as a cold storage product. To cite a specific example, fish caught in the winter time are frequently allowed to drown in the nets, because of the inability of the fisherman by reason of ice and weather conditions, to empty his nets more than once or twice a week. These fish are sold in the market and deteriorate rapidly. The consumer blames cold storage, whereas, as a matter of fact, a cold storage fish delivered in a frozen condition and properly thawed is perfectly wholesome and greatly superior to the so-called ‘fresh’ fish.”

Mr. J. M. Bottemanne in his paper read at the Third International Congress of Refrigeration at Chicago in September, 1913, on investigations made in the Netherlands covering methods of preserving fish by artificial cold, reports:—

The work was divided into four sub-committees as follows:—

1st To make researches as to the effect of freezing and chilling various kinds of fish at different temperatures, especially as regards the conditions of the tissues, the nutritive value, the taste, the time that the fish keeps in good condition, and the commercial fitness for sale; they had to investigate how far these conditions were influenced by the condition of the fish (the degree of fatness, the state of the *rigor mortis*, the bleeding, the gutting, the loss of scales, etc.).

2nd. To investigate the best method of storing, freezing and also thawing.

3rd. To study other methods than ice of preserving fish.

4th. To investigate the fitness of frozen fish as bait.

The reports of sub-committees one and two are most interesting.



Professors J. Boeke and D. A. DeJong of the University of Leyde made numerous tests to find out at what time deterioration would begin to set in. These tests were made beginning with October 1, 1912, and continued through until July 1, 1913. It was found that fish frozen immediately after being caught would hold up in splendid shape, and that upon being tested for eating, after being in storage from two to six weeks, that it was satisfactory in every respect. Report made by these gentlemen is very full and complete, some 35 or 40 pages, and goes into the question from strictly a scientific standpoint, and in not one place in the entire article is anything shown that fish being frozen in any way becomes poisonous.

I am inclined to think that Mr. Bradbury has eaten fish that has not been properly handled where the gall has become diffused through the intestines, which would naturally give the fish a bad taste. This will happen if the fish are not frozen immediately after being caught or within one-half a day or so. While this gives the meat a peculiar flavour, still at the same time, it is not poisonous. The bursting of the gall bladder is the cause of the turning yellow of the fish meat round the liver.

It is interesting to note that these gentlemen in describing good fish and bad fish do so as follows:—

#### *Good Fish—*

Skin is shiny.

Scales strongly adhere to the skin.

Eyes transparent and bulging.

Gills bright red.

Flesh elastic and firm, finger impressions do not remain.

Smell fresh also at the opened gills.

Mouth and gills closed.

Little or no slime on the skin.

Muscular stiffness has set in in a greater or less degree, when the fish is taken in the hand it bends accordingly little or much.

The fish sinks in water.

After a short time a fishy smell and slime on the back appear.

#### *Bad Fish—*

The skin is covered with slime and is spotty, sunken eyes, cornea dull and untransparent, mouth usually open, gills open or easily opened.

Gills lose their fresh colour and become yellow grayish brown.

Fingermarks in the flesh remain.

Smell unpleasant, especially at the gills; held on hand the fish curves over.

Sometimes the belly is swollen and bluish, then the fish will float in water.

In rotting these phenomena increase, in particular of course, the smell.

These signs of good or bad fish must not be taken too absolutely. They do not need to be present all at once or in a particular degree to demonstrate the goodness or badness. Sometimes one peculiarity in a marked degree is enough to condemn the fish.

In freezing of fish it is recommended that they be frozen just as soon after being caught as possible; the sooner the better. It is recommended that in freezing fish that same be immersed in water. In this way all the pores will be closed and the fish itself hermetically sealed, which would keep it from spoiling.

Report on cold storage in Massachusetts, 1912, brought out a great deal of very interesting matter in regard to the handling of fish in cold storage. The season of fish is more limited than that of eggs and butter. Certain fish, however, are caught in the greatest volume during the comparatively short period in each year, varying from two weeks to two months. This period is known in the trade "as the time when the run is on." The season of flush production and heavy freezing in the case of fish comes during the later spring and early summer months. The months of heaviest

production are April, May, June, July and part of August. The product stored during these months is put on the market in the winter and early spring months, December to April.

In view of the numerous articles appearing in press, there seems to be a tendency on the part of a great many people to think that cold storage warehouses are the real cause of the high cost of living. At the time when this investigation was made in Massachusetts, this question was gone into very thoroughly. Report reads as follows:—

“The subject of cold storage naturally divides itself into two main branches of inquiry; first, the effects of cold storage on the health of the people; second, its effect on the cost of living.

It has been charged against cold storage that it enables dealers to hold food products for so long a time that they become unfit for consumption. Goods preserved by the refrigeration method are declared to be inferior to fresh food in quality, wholesomeness and palatability. The consumption of food held for long periods in cold storage is said to produce various disorders. In short, cold storage is regarded in some quarters as a menace to public health.

“It has been contended, furthermore, that cold storage enables speculators to withdraw food products from the market and thus force up prices to an artificial level. The working of the natural laws of demand and supply is said to have been obstructed by the speculative manipulation of food prices through the agency of cold storage, to the great injury of consumers. In short, cold storage is held to be an instrument of monopoly and a cause of high prices.

“The questions that arise in any inquiry into cold storage relate, therefore, first, to the effects on public health, and second, to the effects on food prices.”

Prof. William T. Sedgwick, of the Massachusetts Institute of Technology, who ranks among the foremost experts on questions affecting the health of the people, reports as follows:—

“So far as I am aware, there is no evidence whatever that cold storage is in any way prejudicial to the public health. On the contrary, it is one of the greatest aids to public health, in that it makes food more accessible and more abundant, and thus enables people to keep up their strength and to avoid such diseases as scurvy, from which the human race formerly suffered so intolerably. Various allegations, of course, have been made touching the wholesomeness of cold storage materials, such as that deterioration takes place during cold storage, whereby people are poisoned, or otherwise badly affected, but I have yet to hear of a single instance of carefully investigated and well authenticated food poisoning due to the effect of cold storage—to deterioration during proper cold storage. In fact, I am enthusiastic about cold storage, and what it is doing for mankind today, on land and on sea, in building up vital resistance and driving out the old disease of scurvy, making it possible to live in the woods, or the wilderness, or desert, or on shipboard, for long periods without otherwise fresh food.”

Dr. H. D. Pease of the Lederle Laboratory, New York city, has made numerous investigations in regard to the length of time he figures advisable to attach as a limit to cold storage products and he declares there is nothing that would justify or require a limit shorter than twelve months.

Dr. W. J. Gies of the Columbia University also testified in the Massachusetts hearing that thawed fish appears to be as good as ordinary fresh fish and briefly stated:—

“Briefly stated, fish in cold storage for a year,—blue fish, for example, and fluke,—when allowed to thaw in my office on an ordinary table at room temperature, after twenty-four hours (that is, after the flesh has softened), or after they had softened, appeared to be practically identical with fresh fish of the same kind.”

Mr. Jonathan F. Snow, director of the Provincetown Cold Storage Company, stated to the Commission that no change takes place in fish, fresh caught and stored immediately, during a year's storage.

Mr. E. F. Case, wholesale fish dealer of Cleveland, Ohio, told the United States Senate Committee on Manufactures that two years was the extreme period during which a fish could be kept in cold storage and remain palatable.

Mr. C. M. Prankard, representing the New York Wholesale Fish Dealers' Association, declared that a fish could be kept cold stored in a perfectly wholesome condition for at least one year.

Mr. Kenneth Fowler, fish dealer of New York, stated that up to eighteen months fish could be kept in storage as wholesome as when it went in.

This was in the hearing before the Senate Committee on Manufactures, 1911.

"If you get a fish in that hermetically sealed package, and keep the air conditions and the temperature right, you can keep that fish indefinitely, and there is no more reason why it should be destroyed at the end of a year than there is why you should go out in the city of Washington and destroy valuable goods of any kind."

The Committee in referring to the "Influence of Health" gave their general conclusions as follows:—

"1. A progressive deterioration takes place in perishable food products kept in cold storage; the changes naturally occurring are greatly retarded by refrigeration but are not absolutely suspended. Therefore, a good product that has been held in cold storage is never just as good as the perfectly fresh article, other conditions being equal.

"2. The deterioration taking place during cold storage first appears in a change in flavour, which may affect the palatability of the food, but does not necessarily affect its wholesomeness or nutritive value.

"3. The length of time during which an article of food held in cold storage can be kept wholesome and fit for consumption varies for different commodities.

"4. The period of proper preservation for any particular commodity depends largely on the methods of handling and preparing for cold storage.

"5. Scientific investigation in this field has not yet been carried far enough to enable one to fix normal time limits of cold storage for different commodities.

"On the whole, prolongation of cold storage beyond one year, even under correct conditions, appears to be undesirable, and prejudicial to the public health."

The report of the United States Secretary of Agriculture on Economic Results of Cold Storage reports in regard to fish as follows:—

"With regard to fish, there seems to be no regularity in the heavy months; the three heaviest months in the year beginning with March, 1909, were August, November and January, but in the following year the months were April, July and December. The kinds of fish that go into cold storage are seasonable, and the natural supply does not last throughout the year. There are also often two storages for fish. In the initial one the fish is received fresh at the place where caught and kept a length of time determined by circumstances.

"This place is not usually one of consumption, so that in that event the fish is transferred frozen to cold storage at a place where it is to be consumed.

"In this investigation the two storages are added together in stating time of storage."

Professor J. Gust. Richert, President of the Swedish Cold Storage Association and member of the Royal Swedish Academy of Sciences, has written a book entitled "The Frigatör System." He saw where fish were shipped in refrigerator cars from Lulea to Paris, a distance of 3,000 km., requiring seven days time in transit, and to a great extent over the blistering hot plains of Central Europe; same arriving in excellent shape showing no bad effects from the trip.



This goes to show that freezing of fish and cold storing of fish would not have any poisonous effects upon the meat.

In report furnished by Dr. H. W. Wiley, Chief of the Bureau of Chemistry, United States Government, Washington, covering fish, he shows that after a great deal of experimental work that the freezing of fish would not cause it in any way to suffer in any ill effects. This is particularly interesting in view of the fact that at the time when investigation was made it was done to settle the question as to what the ill effects were on frozen product from the consumer's standpoint. Investigation was brought about owing to a great deal of agitation.

The Health Department of the city of Washington stat that they never have had a case reported by any of their inspectors where fish had become poisonous on account of freezing: fish that are properly frozen.

Dr. Wiley, in the investigation held by the Senate Committee on Manufactures in 1910, at Washington, stated that frozen fish are all right, but the greatest difficulty is to keep the retailers from misrepresenting the fish to the trade. For instance, he claims to have abundant evidence that the thawing of animals is for the purpose of deceiving—that is, fresh blood having been brought, and put on the gills of the fish after being thawed to make people believe that the fish are fresh and not cold storage. He recommends that frozen fish be sold in frozen shape from the health standpoint.

The Fishing Gazette, published in New York in their issue of August 2, 1913, speak editorially:—

"The Commonwealth of Pennsylvania has recently written on its statute books a law which will undoubtedly greatly add to the high cost of living in that State—not through any desire on the part of the members of the State Legislature to wantonly increase the burden now carried by the public, but through sheer ignorance. We refer to the so-called cold storage law, which prohibits the housing of meats or fish products in cold storage or refrigeration plants for a longer period than three months. It has been repeatedly said by those who have carefully studied the question that foodstuffs invariably came out of the freezing plants in as good condition as when they go in. Under the circumstances it would seem that the Legislature should have aimed to provide for a rigid inspection of all foodstuffs before placing it in cold storage, instead of limiting the time that meats, etc., may be held there.

"Under any circumstances the time limit should be such as to render the supply available at such times as there may be a scarcity, due to natural causes, of the product."

This rigid inspection of foodstuffs before placing same in cold storage is according to conversation with Mr. J. D. Ruddick, Dairy and Cold Storage Commissioner of Canada, the most important feature to watch.

The Fishing Gazette recently went on record in regard to limiting the time fish should be held in cold storage, as follows:—

"The idiotic bill now before Congress to limit the time on cold storage for all foodstuffs to two months, would paralyze the fish business of the country, and ruin seventy-five per cent of the merchants engaged in the business of producing fish, which is a perishable article and must be sold at once after taking from cold storage if weather is mild, for it would not pay fishermen to catch fish if the catch could be kept in cold storage only two months. The fish merchants would not attempt to handle frozen fish if they could be held for only two months; the result would be a famine of fish and prices would be prohibitive, and instead of reducing the high cost of living, it would help to make it higher; 'it can't be done.' The sooner this is realized the better for all concerned."

The fishing season is in the summer and early fall, and a short time limit will practically kill the industry from an economic standpoint as frozen fish are sold until

the opening of the next year, about 9 to 12 months. This is caused largely by the fact that the catching season varies.

At the Third International Congress of Refrigeration held in Chicago, September, 1913, the city of Chicago gave a banquet to all visiting delegates. Fish was served at this banquet which had been in cold storage over a year. This does not indicate they cannot be held properly, and furthermore, it does indicate very strongly if cold storage had a tendency to make the fish poisonous they would not have been served. When proper attention is given to the handling of fish in cold storage, there cannot be any more chance of their spoiling than with any other edible products. The main thing is to see they are put away properly in the first place.

The consumption of fish in Canada is increasing very fast. Western Canada is a large consumer and the increased immigration of fish eaters from Latin countries will add very much to the consumption. It is only a question of time when the Dominion will consume the greater part of her production.

Fish are to a large extent taking the place of meats, especially where a family have only limited means of support.

The limiting of the cold storage time or the discontinuance of allowing fish to go into cold storage will be practically speaking a calamity.

## APPENDIX No. 10.

## COLD STORAGE—A DISCUSSION OF ITS UTILITY IN THE CONSERVATION OF FOOD, AND OF THE QUALITY OF COLD STORED PRODUCTS.

By FRANK G. URNER, Editor of *New York Produce Review*.

## FOREWORD.

The writer of this pamphlet, Frank G. Urner, is vice-president of the Urner-Barry Company, of New York, publishers of *The Producers' Price-Current* and *New York Produce Review*, of which latter he is editor. Mr. Urner has had an experience of over thirty years as a market reporter, a student of trade conditions in the produce markets, and a writer on trade economics. In presenting brief extracts of testimony from scientific investigators on the subject of the quality of cold stored products, Mr. Urner has not pretended to represent at all comprehensively the mass of fact and conclusion so developed, but only to set forth the clear evidence that cold stored products, when properly handled, are worthy of the entire confidence of consumers; and to indicate the fact that "quality" in perishable food products depends upon the method of manufacture or preparation and handling more than upon the length of time they are held, under proper conditions and within reasonable limits.

## COLD STORAGE.

The purpose of this pamphlet is to tell the truth about cold storage as it is applied to the preservation of some of the staple food products; to explain the motives which lead to the use of cold storage by dealers in perishable foods, and to consider the effect of such use upon production and prices.

*General Misinformation.*—The general public, depending largely or wholly upon newspapers for information of such matters, has been misinformed in regard to the function and use of cold storage. Ever since the "high cost of living" has been a subject of public agitation the majority of newspaper allusions have been such as to create the erroneous impression that cold storage is a tool by which monopolistic combinations of food dealers control and manipulate prices to their own advantage and the public injury. Grossly exaggerated statements have been printed as to the length of time food products are held in storage and a popular prejudice has been created against cold stored products which is not justified by the facts, and which would probably be dispelled if the facts were known and the real value of cold storage in the economy of food production and distribution is appreciated.

The widespread agitation of the subject of cold storage in connection with the "high cost of living" during the past three or four years has led to proposals of legislation restricting and regulating the industry, many of which have been based upon the misinformation and prejudice before mentioned. Some of the legislative consideration of the subject has doubtless been sincere and predicated upon a proper investigation of the facts—notably so in the case of the elaborate and extensive hearings conducted by the Committee on Manufactures of the United States Senate, and by a commission appointed by the Massachusetts House of Representatives to make exhaustive study of the facts as a basis for legislation. And it is not to be denied that the conduct of all dealings in food products should be subject to such restrictions and supervision as will protect the public health and welfare. But many legislators have

seized upon the widespread agitation, and the prejudice against cold storage created by false and misleading statements, to attack the industry as an enemy to the public interest; and these demagogues have added to the popular misunderstanding by unscrupulous or ignorant assertions, besides proposing the enactment of legal restraints some of which are unwise, unnecessary and harmful.

It is, however, not the purpose of this pamphlet to discuss the question of legislative restriction; the matter is mentioned only to emphasize the fact that no such restriction should be imposed until the true relation of cold storage preservation to the public interest is understood and appreciated. It is rather the purpose here to set forth this relation in its true light and to aid in dispelling prejudice against a system that has grown up naturally in response to a public need and which is now affording facilities of incalculable value to the public in the conservation of food.

*A Homely Illustration.*—Picture a village depending for its water supply upon a mountain stream. When the winter snows are melting and the spring rains abundant the stream is flush to over-flowing with its life-giving burden and the people of that village are supplied with water far beyond their needs; perhaps the stream carries away untouched and unneeded ten times as much water as the people of the village require. But when the summer droughts come the stream falls to a mere fraction of its springtime flush and gives to the people of the village no adequate supply. Without some means of conservation of the surplus in time of flush there may come even a famine for lack of water during the season of natural scarcity. But the people of the village are wise enough to understand the danger and guard against it. They select an appropriate place above the village and dam the stream to create a lake of reserve water which is filled to overflowing in the season of flush and from which an ample supply may be drawn when the stream itself becomes deficient. If they did not take this precaution they would be fools.

Now this picture illustrates the general principle upon which is built up the preservation by cold storage of those foods whose production—or maximum production—is seasonable. But there is an important difference which must be taken into consideration. The streams of butter and eggs and poultry that flow into our cities from great distances throughout the producing territory are not filled as with manna from heaven, or as the stream of water from the free hand of nature. The volume of their flow varies seasonably according to the nature of the product, but these streams are filled by the labour of man in directing and controlling and making available the forces of nature. Nature alone fills our streams with water and dries them up again and no amount of human labour or ingenuity can vary the supply except by conservation of the waste. Nature also causes the cow to give milk, the fowl to lay eggs and reproduce their kind, but to make these supplies of food available and sufficient, and to direct them into the streams that nourish our people requires human intelligence and labour and this, beyond satisfying the needs of the individual, can be induced only by an adequate payment. The sources of our streams of food are lodged in the mountains of human labour—in the business pursuits of those who choose such fields of endeavour as their means of support and profit. So that when the season of flush production comes we must not expect a volume of supply so great that after the people have had all they want a great surplus can be thrown away and wasted—as is the case with the mountain stream of water. On the contrary we can expect a production even during the season of maximum, only equal to what can be disposed of at a price sufficient to encourage and justify that production.

If you will imagine the mountain stream of water to be filled only by the labour of men, pumping the water into it from the ground, you will readily see that even in the spring, when the supply is naturally excessive, the pumpers would not pump any more water into the stream than the consumers below would adequately pay for; and the waste, instead of occurring in the stream would be found in the underground courses; and when the dam was built the people of the village would have to pay the pumpers a living wage to induce them to fill the reservoir for future needs.



Now the cold storage warehouses are the dams by which we are enabled to increase the profitable production of many kinds of food beyond the momentary requirements in seasons of natural abundance. It is manifestly only by such increase of production beyond immediate needs that the supply of these foods can reach its possible maximum; and it is only by a proper preservation of such surplus that the supply of them can be made sufficient during seasons when fresh production is naturally deficient.

*Variability of Production.*—Some understanding of the variability of production is necessary to an appreciation of the utility of cold storage preservation. To those who live in the country and are familiar with the facts of farm life this explanation may seem trite; but many of our city people have little conception of the fact that animal products vary in their natural seasons of supply in the same way if not to the same extent as do the supplies of vegetable products. Everybody knows that strawberries, unless grown and ripened at great cost under glass, are obtainable from any one locality during a very few weeks only; and from all localities, by reason of different climatic conditions, during only a few months. During the rest of the year there are no strawberries to be had at all, except such as are preserved by canning. The same is true of other small fruits and berries, and of the tender vegetables. (Here in passing it is worth considering what would be the effect upon the production of these perishable, short-seasoned small fruits and tender vegetables if there were no means of their preservation? Obviously a much smaller quantity would be raised and the total food supply greatly reduced.) Animal products vary in extent owing to a practical uniformity in the season of natural reproduction. Cows give most milk after the calves are dropped and during the season of most abundant green food; and more calves are dropped in the spring than at any other season. There is a vast difference in the volume of milk production from season to season, reaching its maximum in May and June, thereafter gradually decreasing until a minimum is reached in the following winter. The production of butter and cheese varies even more than the milk flow because the demand for fresh milk is constant and imperative while butter and cheese, being less perishable, can be made in greatest quantity when the surplus of milk is great.

The hatching season for all kinds of fowls is in the spring and early summer and at that season the production of eggs reaches its maximum. Egg production naturally decreases when extreme heat comes on, and falls off rapidly when the hens begin to moult—a process of shedding the feathers and replacing them with new. The moult begins in some sections as early as July, at others not until September or October, and is not usually finished until November. After the moult is finished and the fowls become fully fledged again, the spring pullets are usually old enough to lay eggs, so that in December the egg laying poultry is physically fit for free production; but hens will not lay much in extreme cold or when the ground is covered with snow unless they are very carefully housed and fed, and the rank and file of the farm poultry get no such care. Egg production as a whole begins to increase in February when the weather is moderate, becomes large in March, reaches its maximum usually in April and May, declines steadily during the summer, falls off rapidly in September and October and reaches a minimum usually in November and December. But in December, as well as in January and February, the production is extremely variable, depending upon the weather conditions.

Since the natural hatching season in different sections of the country extends from April to July, reaching its maximum in May and June, it is evident that the natural season for poultry whose character depends upon age is also seasonable. Apart from variations caused by artificial incubation, which are not sufficient to have much influence upon the poultry supply as a whole, the young chickens are chiefly “broilers” from late May to August and chiefly “roasters” from September to December, though small breeds of young chickens, spring hatch, are marketed fresh as broilers until the latter season. But when the young crop of chickens reaches maturity the cockerels

soon become coarse meated and tough and the pullets soon become fowls, so that after about December there is a great scarcity or entire absence of live poultry having the superior characteristics of young chickens fit either for broiling or roasting. Fowls, also, though obtainable fresh killed at all seasons, are in far the best physical condition to serve as acceptable food when about twelve to sixteen months old.

Turkeys, hatched in the spring during the normal season, are rarely big enough to market until October, and few attain full growth until December. They are of the finest quality for food from late November to mid-January, after which the toms become coarse and staggy. There would be very few turkeys eaten after mid-January if people had to depend upon freshly killed birds, owing to the unfavourable physical character of the meat during the late winter, spring and summer.

*Necessity of Preservation.*—Now it will be obvious to anyone who gives the matter any intelligent consideration that preservation of surplus is, in respect to many necessities of life, a prime essential. The storage of water has already been indicated as an instance. The storage of ice for use during the warm season is another. Every kind of vegetable food, save such as may be imported from the tropics or raised expensively under glass, must be preserved from the summer or fall harvest for use in the non-productive season, months later. Methods of preservation have therefore, always been essential to communities dwelling in northern latitudes and they have grown with the necessities of the people. Hard, dry, ripened grains are easily preserved, requiring only a dry storehouse in which they may be kept in their original condition for months without regard to temperature. Certain staple vegetables and fruits, as potatoes, onions, other roots and tubers, apples, pears and other durable fruits, have always been preserved for months after their harvest by simply placing them in cool, dry rooms and protecting them from freezing. Other more perishable vegetables and fruits have, from time immemorial, been preserved by drying and, for ages past, by cooking in sugar and hermetical sealing. And in answer to the same need butter and cheese and eggs have been carried long before the inception of cold storage—for months under conditions which though failing to preserve the quality acceptably were yet generally used because of the urgent need of relieving a natural seasonal scarcity of these foods. Modern cold storage is a direct result of the invention of mechanical refrigeration; and it has afforded the most perfect method of preserving many perishable foods in their original condition. Even those more durable fruits and vegetables formerly preservable for an extended period without it can now, by the possible control of temperature, be carried in much more perfect condition and with a minimum of waste for a longer period; butter can be carried frozen for many months without appreciable loss of quality; eggs can be carried for months with less effect upon their quality than would be given by a week's holding under unfavourable conditions of temperature and humidity; the flesh foods that can in no other manner be preserved in their original, un-cooked condition, may, by freezing, be held for months with no change that can affect their wholesomeness or palatability.

*Cold Storage a Boon.*—It seems evident that such a development as this should prove a boon to mankind. For it is obvious that upon the ability to preserve surplus production depends the profitable opportunity for fullest production. If the people of our country can consume, at a price sufficient to induce production, say a million and a half cases of eggs a week there would be no inducement for the production of three million cases a week during the months of greatest productivity; but if, with a productive capacity of three million cases a week in April and May the production naturally falls to a half million cases in November and December, the greatest production is naturally encouraged by the ability to hold the surplus to the season of scarcity. Thus in all foods, any method of preservation which enables us to carry surplus from a season of maximum production to a period of natural deficiency, permits an increase of production, adds to the total food supply, and must, of necessity, lead to a lower average price than would result from a diminution of the supply.



This naturally leads us to a more detailed consideration of the effect of cold storage preservation upon price levels and to an analysis of the oft-made charges that dealers use the ability to carry goods in cold storage as a means of manipulating markets to their own advantage and the public injury.

*Economic Effects.*—Before the facts of the case in this respect can be understood clearly there are some general conditions of production and distribution that must be known, and one or two fundamental economic laws that must be accepted as inevitable. In the first place it should be considered—as will be obvious upon the most casual thought—that the eggs and poultry and milk products which supply our millions of population are produced upon millions of farms covering most of the agricultural territory of the entire nation. In the case of our larger cities the supplies of these articles are drawn from innumerable primary points situated at more or less distances away—up to perhaps fifteen hundred miles—and at equally great distances from each other. Under such conditions it is impossible that the producers, as a whole, or in any considerable part, can deal directly with the consumer. As a matter of fact the distribution is effected by several classes of intermediate tradesmen. Some of these collect the produce from farmers in their neighbourhood, or from country storekeepers, who receive it from farmers, usually in exchange for needed supplies of other kinds. By this means egg and poultry are aggregated at central points in quantity sufficient to permit proper and more or less uniform preparation for market and economical transportation over great distances. In the case of butter and cheese, creameries or factories are established at central points—either corporate enterprises or co-operative associations of farmers themselves—where milk and cream can be taken from a large surrounding territory and economically manufactured in large quantity. From such centers the product is shipped directly to consuming centers in all sections of the country. And in all consuming centers there are various classes of distributors by whom the products are received from interior shippers, classified according to quality, and directed to appropriate retail points for final distribution to individual consumers. Thus the fact will appear evident that there are many thousands of tradesmen gathering up these farm products in comparatively small quantities and aggregating them for transportation; also that there are many thousands of dealers in the centers of consumption, scattered over the entire country. Now, as a matter of fact, there is no combination between these various classes of collectors and distributors by which any unanimity of action in regard to the prices to be paid or demanded for the produce is possible or attempted. The business field in every phase of the industry is open to any one who wishes to engage in it. And there is no attempt to combine the dealers in any unanimity of policy as to the storage of surplus or the withdrawal of goods from storage. There are associations of shippers, organized for the discussion of public matters of mutual interest and for the encouragement of advanced methods of handling the products; there are also associations of distributors in consuming centers organized for the collection and dissemination of trade facts which may be indispensable to a proper conduct of individual business. But these different and widely scattered associations make no attempt to coerce or control the business activities of their individual members or to dictate their business policy in any respect whatever.

Another fact that should be clearly understood is that the cold storage warehouses as a rule are public institutions open to and soliciting the patronage of all. Their owners do not, in most cases, own any of the goods stored; they simply sell space and guarantee proper temperatures. The storers of food in cold warehouses are legion and disconnected and there is no uniformity in their policy.

(The writer makes these assertions in respect to the general distributing trade in butter, cheese, eggs and dressed poultry, from a personal knowledge, based upon many years of observation and close connection with the trade as a student and reporter of market conditions and prevailing values. But they can readily be shown to be true by any intelligent investigation).

One or two fundamental trade laws must also be considered before the economic effect of cold storage preservation can be understood and some of the fallacious statements in regard to it dispelled. These have to do with the general law of "supply and demand." One is that as a general rule the demand for a commodity increases as its price declines, and decreases as its price advances. Another is that the current value of any article is the highest price at which the quantity urgently offered can be sold. This is manifestly true of any form of property.

We must regard the trade in food products in the light of our general social structure which is, so far, based upon individualism and not socialism. Our government and law recognizes the individual right to legally acquired property and the main-spring of business activity in all directions is profit. A food dealer buys and sells food, not as a philanthropist, but as a means of profit and livelihood. He is, at the same time, entitled to a feeling of satisfaction that he is performing a public service. And it is true that so long as free and unrestricted competition exists, he could not exact a profit on his dealings unless he did perform a useful service, for otherwise he would be crushed out of existence by those distributors who are essential. So also the incentive to the withdrawal of food to cold storage is solely the opportunity to sell the goods later at a higher price and make a profit.

But it can be shown that the ability to make a profit by such holding is coincident with the performance of a public service and not dependent at all upon any imaginary ability to inflict a public injury.

The general utility of cold storage as a means of increasing the production of certain perishable foods has, perhaps, been sufficiently demonstrated. There is now a general recognition of the fact that the ability to carry butter and eggs and poultry and fish from seasons of flush production throughout the succeeding months of natural scarcity does provide our people with more or less liberal supplies when there would otherwise be a great deficiency, and that the institution of cold storage preservation is therefore a public benefit. It remains to be considered how the benefit is gained and what problems the individual dealer has to face when he undertakes to supply this public need in consideration of the profit that he may reasonably expect as a recompense for his investment and risk.

First it is frankly to be stated that the business of carrying food products in cold storage, beyond the mere transient protection of goods in course of current distribution, is speculative. It cannot be otherwise. Some dealers who have established trade requirements that can be closely estimated for a future period, buy in the flush season and store against these known or approximately known needs; and these may claim that their purchases in advance of such requirements are not speculative. But as the output prices are always based upon current market values at the time of final output, and as these prices cannot be foretold, there is a strong speculative element in all such purchases. And the larger part of the stored goods is carried by wholesale merchants who depend upon the open general market for the final outlet, and whose operations are necessarily purely speculative. But no manner of conducting the business of carrying surplus production can be conceived which is not speculative. In the season of flush production there is no means of knowing how much of the excessive supply can safely be carried to the future markets or what price may safely be paid for it; for the extent of the future shortage is variable according to weather conditions and other circumstances that cannot be known, and the extent of future demand for any particular article of food is affected by the supply and cost of other foods. Furthermore the knowledge of quantity being stored from time to time is incomplete and the reports obtainable from certain centers of storage are more or less unreliable, although they are gradually becoming more complete and trustworthy.

The chief guide to individual merchants who store goods for a long hold is the experience of the last previous season's operations, modified, it may be, by general reports and evidences of the volume of current production. As a matter of fact the

storage of these foods—butter, cheese, eggs and poultry—is not always profitable; sometimes large profits are made, but sometimes there are very serious losses, and if a term of years is taken the average result will be found to show only a very moderate profit.

*Uncertainty of Results.*—The great variation in the financial results of carrying these goods in cold storage will be understood as inevitable when the conditions surrounding production are considered. But first it must be understood that there can be no reasonable expectation of profit in carrying any of these commodities past the next following season of flush production, because while there may be some variation in the relatively low point to which values fall in the flush season this difference is never great enough to compensate for the cost of long holding and the lessened value of year old goods as compared with fresh production. There have been occasional instances when butter and poultry have been held longer than twelve months, but such cases are very exceptional and have usually resulted in losses to the original storer. Whenever the surplus carried in cold storage is found to be more than can be sold out at a profit during the succeeding period of scarcity it is the very general practice to force a clearance before the advent of the next flush season regardless of the losses that must be incurred by so doing—and this has always been the case, even before any legal restrictions were placed upon the length of time during which goods could be held in storage.

To appreciate, therefore, the conditions under which the public can realize the benefits of cold storage preservation of surplus production these facts must be clearly borne in mind: that there is no combination of dealers tending to any uniformity of action or policy; that the whole business of storing goods in a season of relative abundance to be sold in a later season of relative scarcity is conducted individually by thousands of dealers, each according to his own views as to the probability of profit; that the total quantity being stored or remaining in storage from time to time is not certainly known, but only indicated by partial information; that all goods stored must, in order to gain a profit, be put into consumption before the next season of flush production.

Bearing these facts in mind the reader can put himself in the place of a dealer in these perishable foods with some appreciation of the problems that confront him both in the storage of the products and in their later withdrawal for sale. It is manifest that as the development of cold storage preservation has induced a production far beyond what would be profitable without it, there is nothing to stop the downward movement of prices in periods of maximum production save the demand for storage. But the views of dealers and speculative buyers as to the safe price to pay are always various and the decline is stopped normally at the point where enough buyers for storage will operate to bring the remaining supply to a parity with the consumptive demand at that price. But there is never any certainty that the price paid for storage is just such as to result in just the proper amount of withdrawal to supply later needs at just a reasonable amount of profit or at any profit at all, considering the proposition as a whole. The quantity withdrawn is never certainly known, the extent of future demand at any particular price level can only be estimated, and the extent of future current production is widely variable and unknowable. As the season advances and these unknown elements become gradually more clearly indicated the disposition to hold or force to sale the individual holdings varies according to individual interpretation of the knowledge available. As a rule the first material reduction of fresh supplies sufficient to force a normal upward movement in prices to a point where stored goods can be sold at any profit at all—even a very slight profit—finds a good many dealers who own goods in storage ready to sell. Later, when the season of greatest natural scarcity is reached, holders of reserve stock are more or less free sellers according to their interpretation of the fuller knowledge of supply and demand then available. Sometimes the conditions of fresh production in the season of natural scarcity become so unfavourable and the reserve is found to be working down so rapidly, that



holders generally see a prospect for great shortage and withdraw stocks from sale for extreme prices; when the outcome proves to justify such expectations extreme prices are realized and large profits may be made. But it is to be considered that when holders do realize extreme profits by holding a moderate quantity of stored goods to a season of exceptional scarcity, the scarcity would be still greater and prices still higher if the reserve had not been so held. So that when it is understood that prices must rise and fall strictly according to the supply available and the demand at various price levels, it will be appreciated that the very fact that a profit is made by holding and *selling* is proof of a public benefit. But very often the conditions of fresh supply during the seasons of natural scarcity—or the developments in respect to demand at a profitable relation to the price paid for stored goods—are unfavourable to holders of reserve and as the next season of increased production approaches more or less heavy losses must be incurred in order to force a clearance. So the occasional large profits realized must be considered in relation to the occasional disastrous losses; and if the results of a series of years are analyzed it will be found that the average profit earned by carrying goods in storage is very moderate—certainly no greater than is reasonable in view of the investment and risk involved. But of course some dealers and operators are more astute than others; some, through a keener judgment of trade conditions, get more benefit from the favourable seasons than loss from the bad seasons—and vice versa. But there is manifestly no means by which this matter of cold storage accumulation can be conducted with any certainty of making the accumulations exactly fit, at a minimum satisfactory profit, the later scarcity of fresh goods. Even if the whole business were organized as one, and conducted by the wisest heads in the nation, it would still be impossible, because the storage must be undertaken in ignorance of the later conditions.

But the public is safe from injury in any event; for the season's yield must be sold before the next season of flush; and if, by too free a storage, prices are sustained for a time above the proper level, they are sure to fall below the normal level when the excess is forced to sale; and if a winter scarcity proves so great as to force prices to an extreme point, absorbing at the same time all the deficient amount of reserve carried, it is equally true that, had more been carried prices would have been higher when the greater reserve was being accumulated. Such a condition is only evidence that through the natural inability to judge future conditions exactly, cold storage preservation has not fully performed its functions; and occasional conditions of extreme scarcity only serve to emphasize the violent fluctuations and extremes of prices for many articles that would be experienced if we had not adequate cold storage facilities.

*The True Effect of Preservation.*—If all these facts are considered it will appear that cold storage cannot be used to raise prices to an abnormal level, considering the season as a whole. It is of course evident that after production has been increased by the ability to store surplus a stoppage or serious restriction of cold storage would, in the flush seasons of products stored, result in a lower fall of prices; but this would make so large a production unprofitable and curtail the yield by driving producers out of that particular line of work until prices in the flush seasons were again restored to a profitable level; and when that occurred the seasons of scarcity would become seasons of practical dearth except for those who could pay extravagant prices; and some kinds of goods, such as broiling and roasting chickens and turkeys that are fit to eat, at some seasons could not be obtained at all. It is also to be considered that with the stimulus to production given by the ability to carry surplus, the yield increases to a point where, in the flush season, despite the withdrawal of large quantities to storage, prices usually fall to about as low a point as possible and afford any fair margin of profit to producers. Further, it is to be considered that dealers cannot make money by holding these products off the market and paying the charges on them; they can only realize by *selling*, and if they make a profit by selling it is

proof that the goods were needed; it is also evident that if the market were deprived of the stored goods when sold, the scarcity would be greater and prices higher through the increased competition to secure the lessened and deficient quantity.

If understood, these considerations should demonstrate the economic necessity of cold storage, and disprove the fallacious assertions that dealers can use the holding facilities to the public injury. It remains to consider the common popular prejudice against cold stored products—a prejudice which is, however, gradually falling away as the subject is becoming better understood.

No one would hesitate to eat bread in the winter and spring because they knew the wheat from which it is made was grown and stored away six months or a year ago. No one would balk at a luscious apple harvested in September and placed on the table in the following May or June. Every one knows that cheese of the usual type is not fit to eat until it has been "ripened" by weeks of curing—a process that is simply delayed by longer holding in artificially corrected temperatures. Butter carried for months in a frozen condition at temperatures about zero changes in character and flavour to no appreciable degree and is practically as good to eat as the day it was made. Eggs deteriorate in quality more or less according to the conditions surrounding them after laying. In hot, damp weather they may become rotten in a week or two; in cold, dry air they keep sweet and fresh flavoured for months. Doubtless a perfectly fresh egg, kept cool and dry, is better when under a week old than one so kept for six to ten months; yet cold stored eggs put away in the best season and then of fine quality are far better in every respect up to six months' proper cold storage than a large proportion of the eggs marketed as promptly as is usual from the western farms to the city consumer. And from October to January—and frequently to February inclusive—properly packed and carried cold storage eggs furnish an excellent and wholesome food when new eggs are so scarce as to be beyond the reach of nine consumers out of ten. Consumers are very likely to class all poor eggs as "cold storage," whereas at many seasons they are far more likely to have become poor because they were kept in less favourable surroundings. There is very rarely a time, even in the periods when fresh eggs are naturally very scarce, when good, sound, sweet flavoured, refrigerator eggs cannot be bought by New York consumers at 25 to 35 cents a dozen retail, according to the variable conditions of supply; and up to the time when new eggs become plentiful—usually during February—the stored goods of the better grades are of a quality which should prove an entirely satisfactory substitute for fresh stock that may cost 50 to 60 per cent more.

Frozen poultry, if frozen when fresh and in perfect condition and properly carried, suffers no appreciable deterioration for months and up to the usual limit of commercial holding cannot be distinguished from fresh killed stock by most people. Furthermore, at some seasons poultry of certain kinds cannot be had at all except from the refrigerators, owing to the nature of the birds, their seasonable hatching period and seasonable growth.

### EXPERT TESTIMONY.

Bearing upon the wholesomeness of cold stored foods much scientific investigation has been undertaken in recent years, the results of which have been widely published. The chief findings have been brought out very fully in the governmental investigations of the general subject of cold storage before alluded to, and we may fittingly conclude this pamphlet with a few extracts from such expert testimony, based upon careful scientific research.

Dr. Harvey W. Wiley, formerly chief chemist of United States Department of Agriculture, in "Use of Cold Storage," Senate Document No. 486 (pp. 4 and 5) says: "Again, there are certain periods of the year at which certain food products are produced in greatest abundance and at these periods the production is larger by far than the immediate demand. The application of cold in such cases may carry over a portion

of these products in a perfectly legitimate way for the benefit of the consumer at those periods of the year when the production of the article ceases altogether or is diminished. The exercise of cold storage in these cases seems to me justifiable, provided the period of detention is not so great as to cause appreciable deterioration."

BRIEF EXTRACTS FROM AN EXHAUSTIVE REPORT OF THE COMMISSION TO INVESTIGATE THE SUBJECT OF THE COLD STORAGE OF FOOD. COMMONWEALTH OF MASSACHUSETTS, HOUSE DOCUMENT No. 1733, 1912.

"Cold storage is a highly important factor in the present system of distributing the food supply in this country. Indeed the services rendered by this agency are so great that cold storage must be regarded as practically indispensable to the general well-being." (Page 12.)

"The value of cold storage in increasing the available supply of perishable food products throughout the entire year is recognized by every person who has given intelligent study to this subject." (Page 17.)

"The members of this commission inspected cold-storage plants in different cities to observe the manner in which they are conducted. In general, conditions were found to be very satisfactory. It appears that scientific methods of refrigeration are carefully followed. The larger plants are of modern construction, most of them having been built within the last ten years. The sanitary conditions in these plants are excellent; the temperatures are properly maintained, and the ventilation is adequate." (Page 28.)

"Instead of being a menace to the public health, cold storage has, in the main, exhibited itself as a great agency for the conservation of the vital resources of the population. It has enlarged, diversified, and enriched the food supply of the people. In the distribution of the food supply to the congested population of the great cities especially, cold storage is an indispensable factor. Without cold storage the crowded masses in the urban centres would be obliged to subsist on a dietary at once more meagre and more costly than that enjoyed at the present time." (Page 32.)

"Professor William T. Sedgwick, of the Massachusetts Institute of Technology, who ranks among the foremost experts on questions affecting the health of the people, characterized cold storage, in his testimony before this commission, as one of the most important and beneficial methods of food preservation. . . . Professor Sedgwick declared further: "So far as I am aware, there is no evidence whatever that cold storage is in any way prejudicial to the public health. On the contrary, it is one of the greatest aids to public health, in that it makes food more accessible and more abundant, and thus enables people to keep up their strength and avoid such diseases as scurvy, from which the human race formerly suffered so intolerably." (Pages 32-33.)

"The Hon. James Wilson, former Secretary of Agriculture, regards cold storage as a great benefit to humanity. 'It is a great blessing,' he declares, 'to be able to put meat, vegetables and fruit into cold storage where they will keep. There is no doubt about that.'" (Page 32.)



BRIEF EXTRACTS FROM TESTIMONY AT THE HEARINGS BEFORE  
COMMITTEE ON MANUFACTURES, U. S. SENATE,  
SIXTY-SECOND CONGRESS, 1911.

Dr. Mary E. Pennington, chief of Food Research Laboratory, U.S. Department of Agriculture, a scientist who has probably devoted more research than any other into the effects of cold storage upon the quality and condition of certain foods, notably poultry and eggs, gave exhaustive testimony. The following extracts from Dr. Pennington's testimony bear directly upon the points discussed in this pamphlet:

*Dr. Pennington's Testimony.*

MR. LITTLEFIELD [Speaking of poultry]: How does the change that takes place at the end of 12 months of cold storage, 10 degrees F., compare with the change that takes place in the same product after 24 hours' exposure under the same circumstances before refrigeration?

DR. PENNINGTON: \* \* \* There would probably be a greater change in 24 hours if the temperature was from 65 degs. to 75 degs. than if the temperature was 10 degrees F. for 12 months.

MR. LITTLEFIELD: That is to say, the ordinary food product that is kept in the house, without being kept in a refrigerator, under ordinary circumstances would show more deterioration than the same food product kept in cold storage for 12 months?

DR. PENNINGTON: If the atmospheric temperature should be over 60 degrees it would—that is in respect to chickens. \* \* We have at the expiration of 12 months [in storage at 10 degs. F.] a change which is fairly comparable with the change at the end of 15 days at 32 degrees F., and with the change at the end of 5½ days in a good house refrigerator, and which is very much less than the change at the end of three days at a temperature of from 65 to 75 degrees. \* \* \*

SENATOR CUMMINS: As to meat kept hard frozen for 12 months; would a chicken so kept and eaten at the end of 12 months be injurious to the health of the person who ate it?

DR. PENNINGTON: I have eaten many of them and found them very palatable.

SENATOR CUMMINS: But scientifically, you know of nothing, that is, you know of no change that has taken place that would result in injury to the person who ate it?

DR. PENNINGTON: I have not been able to find any change which would with our present knowledge, be called injurious.

\* \* \* \*

SENATOR CUMMINS: So, as a whole, you think if we were eating altogether chickens that had been hard frozen for 16 months, we would be eating better food than our forefathers and foremothers handled in the ordinary way; that is your conclusion, I take it?

DR. PENNINGTON: If the poultry has been properly handled before it is hard frozen, and our entire supply should consist of such poultry, I think it would be better poultry than we have been accustomed to heretofore, and better than most of what we have on our markets at the present time.

\* \* \* \*

MR. LITTLEFIELD: You have investigated also during this period with reference to the subject of eggs, have you not?

DR. PENNINGTON: Yes, sir.

MR. LITTLEFIELD: Will you be kind enough to say to the committee whether your results with reference to eggs are practically parallel with the results you have described in connection with poultry?

DR. PENNINGTON: The investigation or study of eggs has been practically along the same lines as the study of poultry. Eggs are more difficult to handle if anything

and keep in good condition than poultry. Nature has set a limit on eggs herself. An egg ordinarily will not keep in good condition under refrigeration for more than ten months—between nine and ten months generally—and it must be an extra good egg that will hold in good condition for ten months. Eggs that are to be kept under refrigeration must be even more carefully selected than poultry which is to be kept hard frozen. The results of deterioration in eggs are more plainly detected by the consumer than are deterioration changes in poultry. By careful handling of eggs, just as by careful handling of poultry the quality [quantity] to the consumer can be enormously increased and the length of time during which eggs can be made available as food for the people can also be increased.

FROM THE TESTIMONY OF DR. WILLIAM J. GIES, PROFESSOR OF BIOLOGICAL CHEMISTRY, COLUMBIA UNIVERSITY,

MR. LITTLEFIELD: Have you had occasion to examine fish that have been the subject of cold storage?

DR. GIES: I have.

MR. LITTLEFIELD: Please state to the committee what your experiments in that line have been.

DR. GIES: Briefly stated, fish in cold storage for a year, blue fish for example, and fluke—when allowed to thaw in my office on an ordinary table at room temperature after twenty-four hours (that is after the fish had softened) appeared to be practically identical with fresh fish of the same kind.

EXTRACTS FROM REPORT OF SPECIAL COMMITTEE APPOINTED BY CHICAGO ASSOCIATION OF COMMERCE, TO INVESTIGATE THE COLD STORAGE INDUSTRY.

A special committee was appointed by the Chicago Association of Commerce to investigate the subject of cold storage of food products and the methods involved therein. The members of the Committee were Arthur R. Reynolds, M.D., former commissioner of health, Chicago; Marvin A. Farr, real estate; Edward Clifford, of Hornblower and Weeks, stock brokers; William S. Kies, attorney and general counsel, Chicago and Western Indiana Railway; C. D. Loper, of Mullen and Co., woollens.

After months of careful study and investigation the committee made an exhaustive report on May 31, 1912, from which the following brief extracts are taken:—

“Your committee finds at the outset that there is an unreasonable prejudice on the part of the public towards food products which have been in cold storage. This prejudice in many instances is unfounded; and in others responsibility for such prejudice is traceable directly to the retailer who sells food products unfit for consumption, many of which have never been in cold storage. The consumer finding the products tainted and unfit for use readily denominates the articles as cold storage products.”

“There is no more reason in our judgment for condemning cold storage because at some time bad products have come out of a cold storage warehouse, than to condemn an orchard because at some time rotten apples have been found in shipments from it.

“Cold storage should not be blamed for the results of an inadequate local inspection of markets and retail places in general.”

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“In reference to the charge that cold storage of food products causes a scarcity and an inflation in prices the fact appears to be that only a small percentage of the annual production of perishable foodstuffs is stored in cold storage warehouses. The

storage of these foodstuffs, however, makes it possible to supply the people of the great metropolitan centres in time of scarce production with the surplus of the time of plentiful production."

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"Exhaustive examination of the statistics compiled under the direction of your committee, and a comparison of these statistics with the facts obtained by the Department of Agriculture, after exhaustive research demonstrate clearly that prices of butter, eggs, poultry and fish have been more uniform during the years since cold storage has become a factor in the case of food products than before that period. These statistics also show that taking an average for a period of years, prices on the whole have been lower than during the years when cold storage was unknown."

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"Whatever prejudice members of your committee may have had against cold storage products at the outset of this investigation has been effaced. We are satisfied that if the public were as familiar with the facts and conditions in the case as we are that instead of protesting against them, consumers would in certain seasons demand cold storage products in preference to those supposedly fresh from the farm, but detained in delivery. There is much greater need of regulating the handling of perishable products by retailers wherever such products may come from, than for legislation regulating cold storage."

#### CONCLUSION.

The foregoing considerations and evidence of scientific experts and distinguished investigators justify the conclusion that cold storage preservation of perishable foods is a most important public utility; that it permits and induces a large increase of production, adds to the total food supply, and must result in a lower average of prices than could occur without it. Also that cold stored products, when properly prepared and handled, are entirely wholesome and palatable, and worthy of the entire confidence of consumers.

## APPENDIX No. 11.

## SUMMARY OF COLD STORAGE CHARGES.

## PRINCE EDWARD ISLAND.

Butter.....	Rate per	cwt. per	month.....	15-20 cts.
Meats.....	"	100 lb. per	"	25-50 "

## NOVA SCOTIA.

Butter.....	Rate per	100 lb. per	month.....	25-50 cts.
Meats.....	"	"	"	12½-25-40-50 cts.
" (lamb).....	Rate per	carcass per	month.....	8-16 cts.
Poultry.....	"	100 lb.	"	12½-25-40-50 cts.
Fish.....	"	"	"	12½-25-40-50 "

## NEW BRUNSWICK.

Butter.....	Rate	per 100 lb. per	month.....	12½-15 cts.
Meats.....	"	"	"	12½-25 " plus 5 cts. handling charge on each carcass.
Poultry.....	"	"	"	25 "
Fish.....	"	"	"	12½-25 "
Apples.....	"	brl.	"	5-10 "
"	"	box	"	3 "
Evaporated Apples.....	"	"	"	4 "
Canned Apples.....	"	100 lb. per	month.....	12½ "

## QUEBEC.

Butter.....	Rate per	100 lb. per	month.....	12½-14-25 cts.
Meats.....	"	100 lb. per	month.....	12½-25-50 cts.
Poultry.....	"	100 lb. per	month.....	12½-25-37½-50 cts.
Fish.....	"	100 lb.	"	12½-25 cts.
"	"	brl.	"	30 "
Cheese.....	"	box	"	3-5-6-7-10 cts.
"	"	"	season.....	4½ cts.
Eggs.....	"	doz. per	month.....	7 ½ "
"	"	case	"	10-12-15-40 "
"	"	"	season.....	40 "
Apples.....	"	brl. per	month.....	10-12-15-40 cts.
"	"	box	"	4 cts.
Other Fruit.....	"	"	"	5-6-10-12-18 cts.
"	"	brl. per	month.....	10-12-15-40 "
"	"	keg.....	"	10-15 cts.
"	"	basket.....	"	3 "
"	"	case.....	"	10-15 "
Vegetables.....	"	bag per	month.....	4-7-8 "
"	"	sack, crate or bskt. per	month	10 "
"	"	brl. per	month.....	12 "

## ONTARIO.

Butter.....	Rate	per 100 lb. per	month.....	12½-14-18-20-25-50 cts.
"	"	"	season.....	62½ cts.
"	"	tub per	month.....	10-15 "
"	"	pkg.....	"	10 "
Meats.....	"	100 lb.	"	12½-15-20-25-37½-50-75-\$1.
"	"	carcass	"	(beef), \$1; (hogs), 50 cts.; (lamb), 7-12½-15-25.
"	"	quarter piece	month (beef).....	25 cts.
Poultry.....	"	100 lb. per	month.....	12½-25-37½-50 cts.
"	"	pair	"	10-15 cts.
"	"	each (turkeys) per	month.....	10 "
Fish.....	"	100 lb. per	month.....	12½-25-50 cts.
"	"	box	"	3-5 cts.
Cheese.....	"	100 lb. per	month.....	12½ cts.
"	"	box	"	2-3-4-5-6-7-8-10 cts.
"	"	"	season.....	25 cts.
Eggs.....	"	case per	season.....	30-40-45 cts.
"	"	"	month.....	5-10-12-15 cts.
"	"	crate	"	10 cts.
"	"	100 lb.	"	12½-50 "
Rabbits.....	"	case (2 doz. to case) per	month.....	10 cts.
Lard.....	"	100 lb. per	month.....	12½ "
Apples.....	"	"	"	12½-50 "
"	"	brl.	"	10-12-13-15-25 cts.

## SUMMARY OF COLD STORAGE CHARGES—Continued.

## ONTARIO—Continued.

<i>Apples</i> .....	Rate per brl. season.....	25-30-45 cts.
" .....	" box month.....	5 "
" .....	" bus. " .....	2½ "
<i>Other Fruit</i> .....	" box or c-s per month.....	10-15 "
" .....	" basket " .....	2½-5 "
" .....	" 100 lb. per season.....	50 "
<i>Evaporated Apples</i> .....	" 100 lb. " month.....	6-12½-50 cts.
<i>Vegetables</i> .....	" bag " month.....	3-10 "
" .....	" crate " season.....	25 "
" .....	" bus. " " .....	5 "
<i>Honey</i> .....	" 100 lb. " " .....	50 "

## MANITOBA.

<i>Butter</i> .....	Rate per 100 lb. per month.....	12½-15 cts.
<i>Meats</i> .....	" " " .....	12½-25 "
<i>Poultry</i> .....	" " " .....	12½-15-25-33½ cts.
<i>Fish</i> .....	" " " .....	12½ cts.
" .....	" box " .....	5 "
<i>Cheese</i> .....	" 100 lb. " .....	12½ "
" .....	" cheese " .....	10 "
<i>Eggs</i> .....	" case " .....	10 "
<i>Lard</i> .....	" 100 lb. " .....	15 "
<i>Apples</i> .....	" box " .....	5 "
" .....	" brl. " .....	15 "
<i>Other Fruit</i> .....	" 100 lb. " .....	12½ "
" .....	" keg " .....	8 "

## SASKATCHEWAN.

<i>Butter</i> .....	Rate per 100 lb. per month.....	25-30 cts.
<i>Meats</i> .....	" 100 lb. " .....	15-25 "
<i>Poultry</i> .....	" 100 lb. " .....	25-50 "
<i>Fish</i> .....	" 100 lb. " .....	25 "
<i>Cheese</i> .....	" box " .....	10 "
" .....	" 100 lb. " .....	10 "
<i>Eggs</i> .....	" case " .....	15 "
" .....	" " season.....	75 "
<i>Lard</i> .....	" cwt. " month.....	20 "
<i>Apples</i> .....	" brl. " .....	15 "
" .....	" box " .....	7-10 "
<i>Other Fruit</i> .....	" " " .....	10 "
" .....	" brl. " .....	20 "
<i>Vegetables</i> .....	" 100 lb. bag per month.....	10 "
" .....	" crate per month.....	25 "
" .....	" sack " .....	10 "
" .....	" cwt. " .....	10 "
<i>Canned Goods</i> .....	" case (24 to c/s.) per month.....	10 "

## ALBERTA.

<i>Butter</i> .....	Rate per cwt. per month.....	25-30 cts.
<i>Meats</i> .....	" " " .....	25-30 "
<i>Poultry</i> .....	" " " .....	30 "
<i>Fish</i> .....	" " " .....	20-25 "
<i>Lard</i> .....	" 20-lb. pail per month.....	3 "
<i>Apples</i> .....	" box per month.....	10 "
<i>Vegetables</i> .....	" cwt. " .....	10 "

## BRITISH COLUMBIA.

<i>Butter</i> .....	Rate per 100 lb. per month.....	20-25 cts.
<i>Meats</i> .....	" 100 lb. " .....	15-20-25-33½-50 cts.
<i>Poultry</i> .....	" 100 lb. " .....	15-20-25-50 "
<i>Fish</i> .....	" " " .....	20-25-50-75 "
<i>Rabbits</i> .....	" " " .....	25 cts.
<i>Cheese</i> .....	" " " .....	15-25 "
<i>Eggs</i> .....	" case " .....	12-13-15 cts.
" .....	" doz. " .....	1-3 ct.
<i>Apples</i> .....	" box " .....	5-6-7-9 cts.
<i>Other Fruit</i> .....	" " " .....	4-7 "
" .....	" 100 lb. " .....	25 "
" .....	" doz. " .....	1-3 "
<i>Vegetables</i> .....	" 100 lb. " .....	25 "

## YUKON TERRITORY.

<i>Butter</i> .....	Rate per 100 lbs.....	\$3.00
<i>Meats</i> .....	" " .....	3.00
<i>Poultry</i> .....	" " .....	3.00
<i>Fish</i> .....	" " .....	3.00
<i>Lard</i> .....	" " .....	3.00



## APPENDIX No. 12.



## 4-5 GEORGE V.

## CHAP. 22.

## AN ACT TO REGULATE COLD STORAGE WAREHOUSES.

[Assented to 12th June, 1914.]

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as *The Cold Storage Warehouse Act*. Short title.
2. In this Act, unless the context otherwise requires,— Interpretation.
  - (a) "Minister" means "the Minister of Agriculture";
  - (b) "cold storage" means the storage of articles of food at or below a temperature of forty degrees Fahrenheit, in a cold storage warehouse;
  - (c) "cold storage warehouse" means an establishment in connection with which refrigerating machinery, or ice and salt, is used for the purpose of maintaining a temperature of forty degrees Fahrenheit, or below, and in which articles of food are stored for periods exceeding twenty-one days;
  - (d) "articles of food" means butter, eggs, fish, poultry and meats, except meat in process of manufacture or curing, and such other foods as may be designated by Order in Council.
3. The Governor in Council may make such regulations as he deems necessary or expedient, to provide for a supervision of all cold storage warehouses. Regulations.
4. Such regulations may provide,— Subjects of regulation.
  - (a) for the licensing of all cold storage warehouses;
  - (b) for the inspection of all cold storage warehouses;
  - (c) for a system of periodic and other reports by owners of cold storage warehouses showing the quantities in storage of the several articles of food;
  - (d) for limiting the several periods of time during which the respective articles of food may be held in cold storage;
  - (e) for the inspection of food products before they are placed in cold storage warehouses, while they are in such warehouse and when they are removed therefrom, and



(f) for labelling or marking food products or packages of food products when placed in cold storage warehouse and when removed therefrom for sale.

Inspectors  
may be  
appointed.

5. The Minister may appoint inspectors and other officers for carrying out the provisions of this Act and the regulations made thereunder.

When inspection  
can be made.

6. Any inspector or other officer so appointed may enter any cold storage warehouse, for the purpose of making an inspection or obtaining such information as may be necessary for the proper enforcement of the Act or the regulations made thereunder. And the owner, manager, superintendent storeman and other employees of every such cold storage warehouse shall give such inspector or other officer every assistance and facility for making such inspection and shall give such full and correct information respecting the warehouse and its contents as may be required by the inspector or other officer.

Information  
required by  
inspecting  
officer.

Exceptions.

7. The provisions of this Act shall not be construed as applying to refrigerated rooms in connection with hotels, restaurants, dining car services, retail shops, private houses, manufacturing establishments, other than packing houses, nor to refrigerator cars or steamships with refrigerated space.

Penalty.

8. Any person, firm or corporation who contravenes any provisions of this Act or any regulation made thereunder, shall be liable, upon summary conviction, to a fine not exceeding two hundred dollars or to imprisonment for a term of six months, or to both fine and imprisonment.

Publication  
of regulations.

9. Every Order in Council and regulation made under this Act shall be published in *The Canada Gazette* and shall be laid by the Minister before Parliament within fifteen days after the commencement of the next session.

## APPENDIX No. 13.



## 9-10 EDWARD VII.

## CHAP. 9.

## An Act to provide for the investigation of Combines, Monopolies, Trusts and Mergers.

[Assented to 4th May, 1910.]

HIS Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

1. This Act may be cited as *The Combines Investigation Act*. Short title.

## INTERPRETATION.

2. In this Act, unless the context otherwise requires,—

Definitions.

(a) "application" means an application to a judge for an order directing an investigation under the provisions of this Act; "Application."

(b) "Board" means a Board of Investigation established under the provisions of this Act; "Board."

(c) "combine" means any contract, agreement, arrangement or combination which has, or is designed to have, the effect of increasing or fixing the price or rental of any article of trade or commerce or the cost of the storage or transportation thereof, or of the restricting competition in or of controlling the production, manufacture, transportation, storage, sale or supply thereof, to the detriment of consumers or producers of such article of trade or commerce, and includes the acquisition, leasing or otherwise taking over, or obtaining by any person to the end aforesaid, of any control over or interest in the business, or any portion of the business, of any other person, and also includes what is known as a trust, monopoly or merger; "Combine."

(d) "Department" means the Department of Labour;

"Department."  
"Judge."

(e) "judge" means, in the province of Ontario, any judge of the High Court of Justice; in the province of Quebec, any judge of the Superior Court; in the provinces of Nova Scotia, New Brunswick, British Columbia, Prince Edward Island, Saskatchewan

katchewan and Alberta, any judge of the Supreme Court; in the province of Manitoba, any judge of the Court of King's Bench, and in the Yukon territory, any judge of the Territorial Court;

- "Minister." (f) "Minister" means the Minister of Labour;  
 "Order." (g) "order" means an order of a judge under the provisions of this Act;  
 "Prescribed." (h) "prescribed" means prescribed by this Act, or by any rule or regulation made thereunder;  
 "Registrar." (i) "Registrar" means the Registrar of Boards of Investigation appointed under this Act.

#### ADMINISTRATION.

Adminis- **3.** The Minister shall have the general administration of  
 tration. this Act.

Registrar of **4.** The Governor in Council shall appoint a Registrar of  
 Boards. Boards of Investigation, who shall have the powers and perform the duties prescribed.

Appointment **2.** The office of Registrar may be held either separately or  
 and tenure of office. in conjunction with any other office in the public service, and in the latter case the Registrar may, if the Governor in Council thinks fit, be appointed by reference to such other office, whereupon the person who for the time being holds such office or performs its duties shall, by virtue thereof and without thereby being entitled to any additional remuneration, be the Registrar.

#### ORDER FOR INVESTIGATION.

Order for **5.** Where six or more persons, British subjects resident in  
 investigation Canada and of full age, are of opinion that a combine exists, and that prices have been enhanced or competition restricted by reason of such combine, to the detriment of consumers or producers, such persons may make an application to a judge for an order directing an investigation into such alleged combine.

Application **2.** Such application shall be in writing addressed to the  
 for order. judge, and shall ask for an order directing an investigation into the alleged combine, and shall also ask the judge to fix a time and place for the hearing of the applicants or their representative.

Form of **3.** The application shall be accompanied by a statement  
 application setting forth,—

(a) the nature of the alleged combine and the persons believed to be concerned therein;

(b) the manner in which the alleged combine affects prices or restricts competition, and the extent to which the alleged combine is believed to operate to the detriment of consumers or producers;

(c) the names and addresses of the parties making the application and the name and address of one of their number or of some other person whom they authorize to act as their representative for the purposes of this Act and to receive communications and conduct negotiations on their behalf.

4. The application shall also be accompanied by a statutory declaration from each applicant declaring that the alleged combine operates to the detriment of the declarant as a consumer or producer, and that to the best of his knowledge and belief the combine alleged in the statement exists and that such combine is injurious to trade or has operated to the detriment of consumers or producers in the manner and to the extent described, and that it is in the public interest that an investigation should be had into such combine. Declaration of applicants.

6. Within thirty days after the judge receives the application he shall fix a time and place for hearing the applicants and shall send due notice, by registered letter, to the representative authorized by the statement to receive communications on behalf of the applicants. At such hearing the applicants may appear in person or by their representative or by counsel. Hearing of application.

7. If upon such hearing the judge is satisfied that there is reasonable ground for believing that a combine exists which is injurious to trade or which has operated to the detriment of consumers or producers, and that it is in the public interest that an investigation should be held, the judge shall direct an investigation under the provisions of this Act; or if not so satisfied, and the judge is of opinion that in the circumstances an adjournment should be ordered, the judge may adjourn such hearing until further evidence in support of the application is given, or he may refuse to make an order for an investigation. Order for investigation by judge.

2. The judge shall have all the powers vested in the court of which he is a judge to summon before him and enforce the attendance of witnesses, to administer oaths, and to require witnesses to give evidence on oath or on solemn affirmation (if they are persons entitled to affirm in civil matters), and to produce such books, papers or other documents or things as the judge deems requisite. Adjournment for further evidence.

8. The order of the judge directing an investigation shall be transmitted by him to the Registrar by registered letter, and shall be accompanied by the application, the statement, a certified copy of any evidence taken before the judge, and the statutory declarations. The order shall state the matters to be investigated, the names of the persons alleged to be concerned in the combine, and the names and addresses of one or more of their number with whom, in the opinion of the judge, the Minister should communicate in order to obtain the recommendation for the appointment of a person as a member of the Board as hereinafter provided. Powers of judge.

## APPOINTMENT OF BOARDS.

- Appointment of Board.**      **9.** Upon receipt by the Registrar of the order directing an investigation the Minister shall forthwith proceed to appoint a Board.
- Constitution of Board.**      **10.** Every Board shall consist of three members, who shall be appointed by the Minister under his hand and seal of office.
- Members of Board.**      **11.** Of the three members of the Board one shall be appointed on the recommendation of the persons upon whose application the order has been granted, one on the recommendation of the persons named in the order as being concerned in the alleged combine, and the third on the recommendation of the two members so chosen.
- Recommendation of third member.**      **12.** The persons upon whose application the order has been granted and the persons named in the order as being concerned in the alleged combine, within seven days after being requested so to do by the Registrar, may each respectively recommend the name of a person who is willing and ready to act as a member of the Board, and the Minister shall appoint such persons members of the Board.
- Communications with representatives of parties.**      2. For the purpose of obtaining the recommendations referred to in subsection 1 of this section it shall be sufficient, as respects the applicants, for the Registrar to communicate with the representative mentioned in the statement as authorized to receive communications on their behalf, and as respects the persons concerned in the alleged combine it shall be sufficient for the Registrar to communicate with the persons named in the order, as the persons with whom the Minister should communicate for this purpose.
- When Minister may select members.**      3. If the parties, or either of them, fail or neglect to make any recommendation within the said period, or such extension thereof as the Minister, on cause shown, grants, the Minister shall, as soon thereafter as possible, select and appoint a fit person or persons to be a member or members of the Board.
- Recommendation and appointment of a judge as third member.**      4. The two members so appointed may, within seven days after their appointment, recommend the name of a judge of any court of record in Canada who is willing and ready to act as a third member of the Board, and the Minister shall appoint such judge as a member of the Board, and if they fail or neglect to make a recommendation within the said period, or such extension thereof as the Minister on cause shown grants, the Minister shall, as soon thereafter as possible, select and appoint a judge of any court of record in Canada to be the third member of the Board.
- Chairman.**      5. The third member of the Board shall be its chairman.
- Vacancies.**      6. A vacancy in the membership of a Board shall be filled in the same manner as an original appointment is made.



**13.** No person shall act as a member of the Board who is one of the applicants for the Board or who has any direct pecuniary interest in the alleged combine that is the subject of investigation by such Board, or who is not a British subject. Persons disqualified as members.

**14.** As soon as possible after all the members of the Board have been appointed by the Minister, the Registrar shall notify the parties of the names of the chairman and other members of the Board. Notice of personnel of Board.

**15.** Before entering upon the exercise of the functions of their office the members of the Board shall take the following oath:— Oath of office.

I, . . . . ., do solemnly swear,—

That I will truly, faithfully and impartially perform my duties as a member of the Board appointed to investigate. . . . .

That I am a British subject.

That I have no direct pecuniary interest in the alleged combine that is to be the subject of investigation.

That I have not received nor will I accept either directly or indirectly any perquisite, gift, fee or gratuity from any person in any way interested in any matter or thing to be investigated by the Board.

That I am not immediately connected in business with any of the parties applying for this investigation, and am not acting in collusion with any person herein.

**16.** The Department may provide the Board with a stenographer and such clerical and other assistance as to the Minister appears necessary for the efficient carrying out of the provisions of this Act. The Department shall also repay any reasonable and proper disbursements made or authorized and certified by the judge who grants the order directing the investigation. Clerical assistance to Board.  
Disbursements.

**17.** Upon the appointment of the Board the Registrar shall forward to the chairman copies of the application, statement, evidence, if any, taken before the judge, and order for investigation, and the Board shall forthwith proceed to deal with the matters referred to therein. Commencement of investigation

#### INQUIRY AND REPORT.

**18.** The Board shall expeditiously, fully and carefully inquire into the matters referred to it and all matters affecting the merits thereof, including the question of whether or not the price or rental of any article concerned has been unreasonably enhanced, or competition in the supply thereof unduly restricted, in consequence of a combine, and shall make a full and detailed report thereon to the Minister, which report shall set forth the various proceedings and steps taken by the Board for the purpose of fully and carefully ascertaining all the facts and circumstances Inquiry.  
Report to Minister.

circumstances connected with the alleged combine, including such findings and recommendations as, in the opinion of the Board, are in accordance with the merits and requirements of the case.

Scope of investigation.

2. In deciding any question that may affect the scope or extent of the investigation, the Board shall consider what is required to make the investigation as thorough and complete as the public interest demands.

Report of Board.

19. The Board's report shall be in writing, and shall be signed by at least two of the members of the Board. The report shall be transmitted by the chairman to the Registrar, together with the evidence taken at such investigation certified by the chairman, and any documents and papers remaining in the custody of the Board. A minority report may be made and transmitted to the Registrar by any dissenting member of the Board.

Minority report.

Publication of reports.

20. Upon receipt of the Board's report and of the minority report, if any, a copy thereof shall be sent free of charge to the parties and to the representative of any newspaper in Canada who applies therefor, and the report and minority report, if any, shall also be published without delay in *The Canada Gazette*. The Minister may distribute copies of the report, and of any minority report, in such manner as to him seems most desirable, as a means of securing a compliance with the Board's recommendations. The Registrar shall, upon payment of such fees as may be prescribed, supply a certified copy of any report or minority report to any person applying for it.

Distribution of copies.

Fee for certified copies.

Reduction of Customs duties to secure reasonable competition.

21. Whenever, from or as a result of an investigation under the provisions of this Act, or from or as a result of a judgment of the Supreme Court or Exchequer Court of Canada or of any superior court, or circuit, district or county court in Canada, it appears to the satisfaction of the Governor in Council that with regard to any article there exists any combine to promote unduly the advantage of the manufacturers or dealers at the expense of the consumers, and if it appears to the Governor in Council that such disadvantage to the consumer is facilitated by the duties of customs imposed on the article, or on any like article, the Governor in Council may direct either that such article be admitted into Canada free of duty or that the duty thereon be reduced to such amount or rate as will, in the opinion of the Governor in Council, give the public the benefit of reasonable competition.

Revocation of patent in certain cases.

22. In case the owner or holder of any patent issued under *The Patent Act* has made use of the exclusive rights and privileges which, as such owner or holder he controls, so as unduly to limit the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any article which may be a subject of trade

trade or commerce, or so as to restrain or injure trade or commerce in relation to any such article, or unduly to prevent, limit or lessen the manufacture or production of any article or unreasonably to enhance the price thereof, or unduly to prevent or lessen competition in the production, manufacture, purchase, barter, sale, transportation, storage or supply of any article, such patent shall be liable to be revoked. And, if a Board reports that a patent has been so made use of, the Minister of Justice may exhibit an information in the Exchequer Court of Canada praying for a judgment revoking such patent, and the court shall thereupon have jurisdiction to hear and decide the matter and to give judgment revoking the patent or otherwise as the evidence before the court may require.

Jurisdiction of Exchequer Court.

**23.** Any person reported by a Board to have been guilty of unduly limiting the facilities for transporting, producing, manufacturing, supplying, storing or dealing in any article which may be a subject of trade or commerce; or of restraining or injuring trade or commerce in relation to any such article; or of unduly preventing, limiting or lessening the manufacture or production of any such article; or of unreasonably enhancing the price thereof; or of unduly preventing or lessening competition in the production, manufacture, purchase, barter, sale, transportation, storage or supply of any such article, and who thereafter continues so to offend, is guilty of an indictable offence and shall be liable to a penalty not exceeding one thousand dollars and costs for each day after the expiration of ten days, or such further extension of time as in the opinion of the Board may be necessary, from the date of the publication of the report of the Board in *The Canada Gazette* during which such person so continues to offend.

Combines restricting manufacture, trade or competition.

Penalty.

#### SITTINGS OF BOARD.

**24.** The sittings of the Board shall be held at such times and places as are fixed by the chairman, after consultation with the other members of the Board, and the parties shall be notified by the chairman as to the times and places at which sittings are to be held: Provided that, so far as practicable, the Board shall sit in the locality within which the subject-matter of the proceedings before it arose.

Sittings of Board.

**25.** The proceedings of the Board shall be conducted in public, but the Board may order that any portion of the proceedings shall be conducted in private.

Proceedings.

**26.** The decision of any two of the members present at a sitting of the Board shall be the decision of the Board.

Decisions

**27.** The presence of the chairman and at least one other member of the Board shall be necessary to constitute a sitting of the Board.

Quorum.

Absence of member.

**28.** In case of the absence of any one member from a meeting of the Board the other two members shall not proceed, unless it is shown that the absent member has been notified of the meeting in ample time to admit of his attendance.

Appearance of parties.

**29.** Any party to an investigation may appear before the Board in person or may be represented by any other person or persons, or, with the consent of the Board, may be represented by counsel.

When counsel appointed by Minister.

**30.** Whenever in the opinion of the Minister the public interest so requires, the Minister may apply to the Minister of Justice to instruct counsel to conduct the investigation before a Board, and upon such application the Minister of Justice may instruct counsel accordingly. The fees and expenses allowed to such counsel by the Minister of Justice shall be paid out of such appropriations as are made by Parliament to provide for the cost of administering this Act.

Fees.

Contempt of Board.

**31.** If, in any proceedings before the Board, any person wilfully insults any member of the Board, or wilfully interrupts the proceedings, or without good cause refuses to give evidence, or is guilty in any other manner of any wilful contempt in the face of the Board, any officer of the Board or any constable may take the person offending into custody and remove him from the precincts of the Board, to be detained in custody until the conclusion of that day's sitting of the Board, and the person so offending shall be liable, upon summary conviction, to a penalty not exceeding one hundred dollars.

Penalty.

#### WITNESSES AND EVIDENCE.

Witnesses and evidence.

**32.** For the purposes of an investigation the Board shall have all powers which are vested in any court of record in civil cases for the following purposes, namely: the summoning of witnesses before it, and enforcing their attendance from any part of Canada, of administering oaths, and of requiring witnesses to give evidence on oath or on solemn affirmation (if they are persons entitled to affirm in civil matters) and to produce such books, papers or other documents or things as the Board deems requisite to the full investigation of the matters into which it is inquiring.

Oath.

**2.** Any member of the Board may administer an oath.

Signature of chairman.

**3.** Summonses to witnesses and all other orders, process and proceedings shall be signed by the chairman.

Inspection of documents.

**33.** All books, papers and other documents or things produced before the Board, whether voluntarily or in pursuance of summons, may be inspected by the Board, and also by such parties as the Board allows.



**34.** Any party to the proceedings shall be competent and may be compelled to give evidence as a witness. Parties as witnesses.

**35.** Every person who is summoned and duly attends as a witness shall be entitled to an allowance for attendance and travelling expenses according to the scale in force with respect to witnesses in civil suits in the superior courts of the province in which the inquiry is being conducted. Expenses of witnesses.

**36.** If any person who has been duly served with a summons and to whom at the time of service payment or tender has been made of his reasonable travelling expenses according to the aforesaid scale, fails to attend or to produce any book, paper or other document or thing as required by his summons, he shall, unless he shows that there was good and sufficient cause for such failure, be guilty of an offence and liable upon summary conviction to a penalty not exceeding one hundred dollars. Failure of witness to attend or to produce documents. Penalty.

**37.** The Board may, with the consent of the Minister, employ competent experts to examine books or official reports, and to advise it upon any technical or other matter material to the investigation, but the information obtained therefrom shall not, except in so far as the Board deems it expedient, be made public, and such parts of the books, papers or other documents as in the opinion of the Board are not material to the investigation may be sealed up. Experts.

#### REMUNERATION AND EXPENSES OF BOARD.

**38.** The members of a Board shall be remunerated for their services as follows:— Remuneration of Board.

(a) To the two members first appointed an allowance of five dollars each per day for a time not exceeding three days during which they may be actually engaged in selecting the third member of the Board.

(b) To each member an allowance at the rate of twenty dollars for each day's sitting of the Board.

**39.** Each member of the Board shall be entitled to his actual and necessary travelling expenses and an allowance of ten dollars per day for each day that he is engaged in travelling from or to his place of residence for the purpose of attending or after having attended a meeting of the Board. Travelling expenses.

**40.** No member of the Board shall accept in addition to his travelling expenses and allowances as a member of the Board any perquisite, gift, fee or gratuity of any kind from any person in any way interested in any matter or thing that is being investigated by the Board. The acceptance of any such perquisite, gift, Acceptance of gratuity prohibited.



**Penalty.** gift, fee or gratuity by any member of the Board shall be an offence, and shall render such member liable upon summary conviction to a fine not exceeding one thousand dollars, and he shall thereafter be disqualified to act as a member of any Board.

**Vouchers for expenses.** **41.** All expenses of the Board, including expenses for transportation incurred by the members thereof or by persons under its order in making investigations under this Act, salaries of employees and agents, and fees and travelling expenses of witnesses, shall be allowed and paid upon the presentation of itemized vouchers therefor, approved and certified by the chairman of the Board, which vouchers shall be forwarded by the chairman to the Registrar. The chairman shall also forward to the Registrar a certified and detailed statement of the sittings of the Board, and of the members present at each of such sittings.

**Detailed statement of sittings.**

#### MISCELLANEOUS.

**Technical irregularities.** **42.** No proceedings under this Act shall be deemed invalid by reason of any defect of form or any technical irregularity.

**Evidence of report.** **43.** Evidence of a report of a Board may be given in any court by the production of a copy of *The Canada Gazette* purporting to contain a copy of such report, or by the production of a copy of the report purporting to be certified by the Registrar to be a true copy.

**Allowances determined by Minister.** **44.** The Minister shall determine the allowance or amounts to be paid to all persons, other than the members of a Board, employed by the Government or any Board, including the secretaries, clerks, experts, stenographers or other persons performing any services under the provisions of this Act.

**Regulations by Governor in Council.** **45.** The Governor in Council may make such regulations, not inconsistent with this Act, as to him seem necessary for carrying out the provisions of this Act and for the efficient administration thereof.

**Publication.** 2. Such regulations shall be published in *The Canada Gazette*, and upon being so published they shall have the same force as if they formed part of this Act.

**To be laid before Parliament.** 3. The regulations shall be laid before both Houses of Parliament within fifteen days after such publication if Parliament is then sitting, and if Parliament is not then sitting then within fifteen days after the opening of the next session thereof.

**Annual report to Parliament.** **46.** The Minister shall lay before Parliament, within the first fifteen days of the then next session, an annual report of the proceedings under this Act.

**1907, c. 11 amended.** **47.** Subsection 1 of section 12 of *The Customs Tariff, 1907*, is repealed.

**48.** This Act shall not be construed to repeal, amend or in R.S., c. 125. any way affect *The Trade Unions Act*, chapter 125 of the Revised Statutes, 1906.

## SCHEDULE.

### FORM 1.

#### APPLICATION FOR ORDER DIRECTING AN INVESTIGATION.

"The Combines Investigation Act."

(Section 5.)

Dated at ..... this  
..... day of ....., 19..

IN THE MATTER OF an alleged combine [*here state shortly the nature of the combine*].

To the Honourable [*here insert the name of the judge*], a Judge [or, Chief Justice as the case may be] of the [*here insert the title of the court*].

The undersigned are of opinion that a combine exists [*here state shortly the nature of the alleged combine*] and that prices have been enhanced [or, competition has been restricted by such combine, as the case may be] to the detriment of consumers [or, producers, as the case may be].

The undersigned therefore apply for an order under "The Combines Investigation Act" directing an investigation into such alleged combine.

[*Here state—*

(a) *the nature of the alleged combine and the persons believed to be concerned therein; and,*

(b) *the manner in which the alleged combine affects prices or restricts competition, and the extent to which the alleged combine is believed to operate to the detriment of consumers or producers, as the case may be.*]

#### STATEMENT ACCOMPANYING APPLICATION FOR ORDER.

Dated at ..... this  
..... day of ....., 19..

The undersigned hereby authorize..... of ..... [*give name and place of residence*] to act as our representative for the purposes of "The Combines Investigation Act," and to receive communications and conduct negotiations on our behalf.

The

The names and addresses of the persons applying for the aforesaid order are as follows.—

Names.	Addresses.

STATUTORY DECLARATION ACCOMPANYING APPLICATION FOR ORDER.\*

CANADA:  
Province of ..... }  
To Wit.

I, ....., of the ..... of .....  
in the ..... of .....  
do solemnly declare:—

1. That the alleged combine operates to my detriment as a consumer [or, producer, *as the case may be*].

2. That to the best of my knowledge and belief the combine alleged in the foregoing statement exists and that such combine is injurious to trade [or, has operated to the detriment of consumers, or, producers, *as the case may be*] in the manner and to the extent described.

3. That it is in the public interest that an investigation should be had into such combine.

And I make this solemn declaration conscientiously believing it to be true, and knowing that it is of the same force and effect as if made under oath, and by virtue of The Canada Evidence Act.

Declared before me at ..... in the county of .....  
this ..... day of ..... 19..

FORM 2.

ORDER DIRECTING INVESTIGATION.

“The Combines Investigation Act.”

(Section 7.)

IN THE MATTER of the application of [*here insert the names of applicants*], dated the ..... day of ..... 19..

\*A declaration as above must be made by each applicant.

for an order directing an investigation under "The Combines Investigation Act" into an alleged combine [*here state shortly the nature of the combine*].

I, the Honourable . . . . ., a Judge [*or, Chief Justice, as the case may be*] of [*here insert the name of court*] after having read the application of [*names of applicants*], dated the . . . . . day of . . . . . 19.., the statement and statutory declarations accompanying the same and the evidence produced by the said applicants, am satisfied that there is reasonable ground for believing that a combine exists [*here describe nature of combine*] which is injurious to trade [*or, which has operated to the detriment of consumers, or, producers, as the case may be*], and that it is in the public interest that an investigation should be held, and I do therefore direct that an investigation be held, under the provisions of the said Act into the following matters, that is to say: [*here set out the matters to be investigated.*]

The names of the persons alleged to be concerned in the alleged combine are [*here insert names and addresses*] and I am of opinion that the Minister of Labour should communicate with [*here insert the name or names with, in each case, the address*] in order to obtain the recommendation for the appointment of a person as a member of the Board of Investigation on behalf of those concerned in the said alleged combine.

Dated at . . . . . this . . . . . day of . . . . . 19..

## APPENDIX No. 14.

## MEMORANDUM BY MR. WAY.

INLAND REVENUE—CANADA.

WEIGHTS AND MEASURES STANDARDS BRANCH.

CHIEF INSPECTOR'S OFFICE,

OTTAWA, January 21, 1914.

To the Commission on High Cost of Living.

The Weights and Measures Law of Canada and the Weights and Measures Inspection Service are exclusively concerned with the accuracy and inspection of all weights, measures and weighing machines used in trade, and have no jurisdiction over the accuracy of the "weight" and "measure" delivered—or what may better be termed dishonest short weight and measure.

The above is clearly apparent by reference to section 30 of the Act, where a distinction is made between a measure and a container, vessel or package.

The position taken in the past is that dishonest weight is common fraud, the public being entitled to protect themselves under the common law.

The result is the Weights and Measures Inspection Service affords no protection to the public other than to see that the apparatus used in trade pass a periodical biennial—in some cases, annual inspection.

The apathy and reluctance of the public, and the dependence of the retailer upon the few wholesale supply houses, failing responsible Government supervision over quantitative weight, opens the door to many questionable practices that undoubtedly have some bearing on the high cost of living.

The chief factor contributing to the high cost as regards retail trade and weights and measures, is the increase of packed goods—in which regard the absence of the Government supervision is most apparent. Soda biscuits for instance are sold by the package—on which is printed "not sold by weight." A customer asks for one pound, and is given a package—the aforesaid labelling protecting the trader from all prosecution. Butter is sold by the pound, but never weighed, and the quantity delivered is not represented as being sold as one pound, the entry on the bill being "1—Creamery—35c."

Consider the vast quantities of Prepared Breakfast Food, all of which is sold by the "package," without any reference to weight or protection therefrom.

Your attention is drawn to extracts from American laws appended hereto that meet such conditions, and which according to articles in "The annals" have had a great bearing on the cost of living.

An important contributory factor to high cost is the general introduction of automatic computing weighing machines. These machines indicate simultaneously with the weight, the cost of the article weighed—the result is money-weight. For example a "roast" is called for, placed on the scale, and the price at once is called \$1.35—no weight is mentioned. The action is so swift that although the weight is indicated on all such machines on the public side, the latter are unable to reckon the value. In this year's Weights and Measures amendments provision is made for the inspection of these computing charts, but the lack of Government inspection of "weights delivered" again leaves a clear road to fraud, because the bill of sale reads "Beef Roast—\$1.35." If the meat is 22 cents a pound and the customer weighs the



meat at home and finds an excess charge is made, action cannot be taken even under the common law because the "weight" is *not* given on the bill, and the "roast," not the "quantity," is sold and delivered for \$1.35.

With Government "*weight*" and "*measure*" inspection and supervision, a few test cases in a city, and one or two prosecutions, the public would get what they pay for.

In connection with the preceding and with the questionable practice, so prevalent, of selling such large collective articles as potatoes, apples, etc., by measure, I strongly advocate an amendment to the Weights and Measures Act, to the following effect: "All commodities, other than liquids, shall be sold by weight." (This would also control packages.)

I am unable to quote any law enacting same, the nearest being the New York State law, which only specifies *certain* commodities that must be so sold.

*Expenditure and Costs.*—The expenditure for the Weights and Measures Inspection Service for the last year was \$131,344.17—of which \$100,696.52 was collected in fees. This is for the present periodical duties of inspection and stamping.

The introduction of Short Weight Inspection duties would necessarily greatly increase the number of officers and expenditures, and become a Government obligation.

It is most desirable, in my opinion, to emphasize that the Weights and Measures Inspection Service should be administered as a protective service only—not in any way as revenue producing.

Nevertheless, fees must be largely perpetuated to prevent indiscriminate and paralyzing demands for inspection. Canada is of vast territory, and it would only seem necessary to have short weight supervision in the large cities, requiring but a few additional officers, but of high qualifications.

It might not be inadvisable to mention that this same question has been agitated in England for several years, but the Imperial Government do not seem disposed to act, for in March, 1911, the President of the Board of Trade, replying to a question in the House, said: "The whole question of short weight and measure has been under the consideration of the Board of Trade for some time past, and inquiries were still being pursued. The question was by no means free from difficulty, and he was not at present able to say what the result of the inquiries would be"—and nothing has yet been done.

*Cheese Commission Report.*—This report, in my opinion, has very little bearing on the cost of living—but will serve to emphasize the vital need of efficient weights and measures inspection—since the same is the fundamental of household economy, and is inseparably associated with the daily life of every man, woman and child.

I would refer you to the paragraphs marked on pp. 8, 10, 14, 15.

*Milk Bottles.*—The records of the Standards Branch show many tests on milk bottles—all of which were found short with the exception of some from Winnipeg which were found 3.3 per cent too large. The shortages reported are:—

Bottles from Montreal, 1909—

1 quart-bottle—8½ drams short—1.25 per cent short.

2 1-pint bottles—6 drams short—2 per cent (approximately).

From Ottawa, 1909—

Quart-bottles—½ ounce short—1.25 per cent short.

Pint bottles—¼ ounce short—1.25 per cent short.

From Toronto, 1910—

1 ½-pint bottle, 5 per cent short.

(One of 2-gross.)

From Woodstock, 1911—

2 pint-bottles—3 ounces short—15 per cent short (wine measure).

From Toronto, 1912—

1 pint-bottle (sample)— $3\frac{1}{4}$  per cent short (This resulted in exportation of 16,000 bottles.)

From the above it will be noted shortages average between  $1\frac{1}{4}$  and 3 per cent.

*The results of Inspection.*—According to a letter on file from The Diamond Flint Glass Co., of Toronto, March, 1911, they evidently figure on there being 10 per cent of culls if bottles are inspected.

This will raise the price per gross. If a fee of 50 cents per gross is charged for inspection—since it would be contrary to present weights and measures regulations to exempt them from an inspection fee—this would also advance prices.

The Ottawa Dairy are on record as using 750 gross per annum—which at above fee would mean an additional expenditure of \$375 per annum.

Added to which the life of a bottle upon the statement of the same company is only about six months.

Mr. Fyfe, my predecessor, gave this question considerable attention in 1910—amongst other things, there is a statement on file that the bottle manufacturers would have little cause for complaint if the toleration of error for pints and quarts were fixed at 14 and 20 drams.

That is, such bottles should be allowed a toleration: Pints of  $4\frac{1}{4}$  per cent approx.; quarts of 3 per cent approx.

This would defeat inspection—whilst a more rigid accuracy would send up prices.

Government inspection or supervision is, in my judgment, an obligation under the Weights and Measures Act—but there is a doubt whether the possible advance in the price of milk to meet the charges of increased accuracy, would not outweigh the average shortage under the present non-inspection system.

Concluding—the chief relation between weights and measures inspection and the cost of living is, that after an instrument has been inspected and stamped, a trader can deliver short weight or measure without hindrance from any Government official—upon packed and canned goods, there is no protection, and against dishonest pilfering in retail there is only ineffective recourse to common law.

Attached please find extracts from U.S.A. Laws *re* packet goods, etc.

Yours truly,

(Signed) E. O. WAY,  
*Chief Inspector.*

#### EXTRACTS FROM OTHER LAWS *re* WEIGHTS AND MEASURES STATE OF NEW YORK.

*Milk Bottles.*—"Bottles and jars used for the sale of milk or cream shall have clearly blown (or moulded) or otherwise permanently marked, in the sides or bottom of the bottle, the name, initials, or trademark of the manufacturer and a designating number. . . . ." (the latter being furnished by the State Department).

"Any manufacturer who sells milk and cream bottles. . . . that do not comply as to size, marking, etc., with the provisions of. . . . shall suffer a penalty of \$500."

"Any dealer who knowingly uses for the purpose of selling milk or cream, jars or bottles. . . . that do not comply. . . . shall be deemed guilty of giving false or insufficient measure."

NOTE: Practically the same provisions hold good in Massachusetts, Wisconsin, Minnesota, Detroit, and other states and cities.

*Packages, etc.*—New York State—"When commodities are sold or offered for sale in containers. . . . whose size is not otherwise provided for by statute, the net quantity of the contents. . . . or a statement that the specified weight *includes* the container,

the weight of which shall be marked, shall be plainly and conspicuously marked, branded or otherwise indicated on the outside, etc....."

"A 'Container' shall include any carton, box, crate, barrel, half-barrel, hamper, keg, drum, jug, jar, crock, bottle, bag, basket, pail, can, wrapper, parcel or package."

*Method of Sale*—New York State.—"All meat, meat products and butter, shall be sold or offered for sale by weight, all other commodities not in containers, shall be sold or offered for sale by standard weight, measure or numerical count, and such weight, measure or count shall be marked on a label or tag attached thereto; provided, however, that vegetables may be sold by the head or bunch."

Another important clause comes from the Massachusetts law.

*Short Weight*.—"Whoever, himself or by his servant or agent.....gives or attempts to give *false* or *insufficient weight* or measure shall for the first offence be punished, etc....."

This is necessarily a corollary to an inspection of weighing.

Personally I am disposed to prefer the suggestions of the Incorporated Society of Inspection of Weights and Measures of England in the matter of sales—the principal two being (1) All goods offered for sale by retail in packages which have previously been made up and set aside with a view to sale, shall be sold by weight and not by price only without any reference to weight.

(2) That of all packages which are not equal in weight (net weight) to any one of the Board of Trade Standards of Avoirdupois, shall have the represented net weight clearly marked on the outside.

NOTE: Advocacy of this clause is based upon the possible saving in marking or printing all packages, wrappers or labels with weight values—any package not marked would be assumed by the inspecting officers to be a  $\frac{1}{4}$ -pound,  $\frac{1}{2}$ -pound,  $\frac{3}{4}$ -pound, 1 pound, etc. It would also assist in eliminating odd and irregular weights in net contents.

A precedent to the above can be found in the Provincial Bread Act, administered by municipal officers.

(Initialed) E. O. W.

## APPENDIX No. 15.

*MEMORANDUM.—Adulteration and Inspection of Food Stuff.*

Of the many directions in which existing laws seek to make selfishness impotent and to disject ignorance, my personal experience for thirty years past has been confined to that which deals with foods, drugs and agricultural fertilizers. Fraud in manufacture and sale is not peculiar to the classes of articles named; but, from the fact that food is in universal demand, its manufacture and sale offer tempting facility to fraud. To substitute, in whole or in part, an article of low value for one of high value is an irresistible temptation to the selfish manufacturer and vendor; and where the ignorance of the consumer makes it impossible for him to distinguish between the genuine and the surrogate, he is sure to become the prey of imposture. New discoveries in material and in processes of manufacture have made, and continue to make, it more and more possible to imitate recognized and well known foods, and thus to defraud the unwary purchaser. Recognizing this fact, Canada, in common with all other civilized countries, has enacted laws which are designed to protect the public in the matter described. Our Food Act is known as the Adulteration Act, and, in its original form dates from 1876. Since first being placed in our statute book it has been considerably modified, conformably to experience gained. Even as now written it is by no means perfect, although statistics in my possession prove beyond question that a great change for the better has taken place in our foods since 1876. Perhaps the greatest difficulty found in making the Act effective from the first was the vagueness attaching to the use of names of the various foods in ordinary use. Every one thinks he knows the meaning of such terms as flour, sugar, milk, cheese, etc., but when a case involving the definition of these terms comes before the courts, it by no means follows that the matter is as simple as it looks. A large part of the work done under the Adulteration Act has consisted of studies made with a view to legally defining foods. In consequence of progress made in this direction we find it comparatively easy to declare adulteration where it exists, and to secure judgment. It by no means follows that some changes in definition may not yet be justifiable. I might illustrate this in the case of butter. Following English precedent, we have ruled that not more than 16 per cent of water may be present in legal butter. I am convinced that this limit is still too wide. Country butter of good quality seldom contains more than 9 or 10 per cent of water; and we have ample records to prove that butter as known to our mothers seldom contained more than 10 per cent of water. It is sufficiently evident that, to buy water at the present price of butter is a bad investment. Butter-making is now in the hands of factories, some of these being of very large capacity. It is to their manifest advantage to retain the largest amount of water in their product that the law allows. Hence we seldom find so-called creamery made butter with less than 15 or 16 per cent of water. It has been found possible to cause butter to retain as much as 30 per cent of water, and several samples recently in our hands actually contained this amount. Of course these cases will be prosecuted; but their occurrence indicates how necessary it is that the public should be protected by law.

Perhaps the most important improvement in the food law now apparent is such a change in the *modus operandi* as shall make it apply to importations of foodstuffs into Canada. I have knowledge of shipments of adulterants for pepper and other spices having no food value, being delivered at Halifax. These adulterants we found in samples of pepper bought at retail in many widely separated towns in Canada;



and it goes without saying that the whole shipment found its way into commerce. Had we been able to stop this shipment at the port of entry and to refuse its admittance into the country, just so much money as was paid for it by defrauded consumers would have been saved to them. I am endeavouring to secure such a change in administration of the Act as shall meet cases of the kind. It is certain that the cost of living is increased unnecessarily by every case of fraud. The man who pays the price of legal butter for an article containing 30 per cent of water when the price of butter is 30 cents a pound is paying 5 cents too much on each pound he buys. Otherwise expressed this means that on the assumption that the butter he buys is needed for nutriment, then, in order to obtain necessary nutriment he must purchase 6 pounds in order to get the nourishment that should have been found in 5 pounds of legal butter; and the cost of living, so far as this item is concerned, is increased 20 per cent. Articles which I have noted as particularly subject to adulteration of the kind referred to, and which might equally well have been used to illustrate the subject are: Baking powders, catsups and other sauces; coffee; condensed milk; cream of tartar; flavouring extracts of many kinds; honey; ice cream; jams and jellies; lard; lime juice; maple sugar and syrup; milk; olive oil; vinegar.

Cattle foods (bran, shorts, etc.) are necessarily inspected from time to time, in order to check known tendencies to fraud in these articles. Fertilizers, insecticides and many drugs have been shown to lend themselves to sophistication, and to require frequent inspection.

• (Signed) A. MCGILL.

Janury 30, 1914.



## APPENDIX No. 16.

## MEAT INSPECTION IN CANADA.

*Memorandum for the Veterinary Director General—Prepared by James Audley.*

## SUMMARY.

(1) *Number of Establishments and totals of animals slaughtered each year from start of meat inspection. Per cent of increase over last year also shown.*

(2) *Hog Killings of Canada, Denmark and Ireland. Irish live stock exports. Sheep stock of Canada and New Zealand.*

(3) *Condemnations on cattle and swine, year ending March, 1913, showing per cent for tuberculosis, also an estimate of monetary loss on hogs.*

(4) *Live Stock Receipts at Toronto, Montreal and Winnipeg, year ending December, 1913. Note heavy calf receipts Montreal.*

(5) *Provincial Killings and per cent of total slaughter eight months ending November 30, 1913.*

I would draw your attention to the enormous export of cattle to the United States for the past eight months and which total up 185,201.

Toronto market is now about the highest on the continent, \$9 being paid for cattle on that market in the past few days.

The imports of sheep for immediate consumption being 162,422; besides this importation of live animals there is a lot of Australian and New Zealand mutton coming to British Columbia and western Canada and also beef from Australia.

Owing to the heavy hog killings out west, eastern establishments are drawing a lot of hog products from as far west as Vancouver, and a lot of bacon, etc., is being shipped to the United States from western establishments.

I might say that of total cattle slaughtered, calves represent about 23 per cent.

JAMES AUDLEY.

Janury, 1914.

Live stock slaughtered in Canada at inspected establishments:—

	No. Establish- ments.	Cattle.	Sheep.	Swine.
7 months ending March 31, 1908.....	28	131,660	86,049	861,989
Year ending March 31, 1909.....	32	298,241	191,792	1,532,796
Year ending March 31, 1910.....	30	384,789	257,049	1,261,496
Year ending March 31, 1911.....	32	411,308	329,017	1,452,237
Year ending March 31, 1912.....	32	408,401	376,437	1,852,997
Year ending March 31, 1913.....	32	450,390	455,647	1,607,741
Year ending March 31, 1914 (estimated).....	34	546,000	491,000	1,646,000
April 1 to November 30, shows increase of over previous year.....		29.76%	9.00%	3.75%

Irish and Danish hog killings compared with Canadian, eleven months ending November 30, 1913:—

*Ireland.....	1,099,091
*Denmark.....	2,011,350
Canada.....	1,405,582

\*Almost all of which is exported to England in the shape of bacon.

Ireland exported same period live animals:—

Cattle.....	1,050,718
Sheep.....	637,712
Swine.....	162,556

## SHEEP.

Canada compared with New Zealand:—

	Canada.	New Zealand.
Census, 1913.....	2,141,000	23,996,000

Year ending March, 1913, Canada imported 229,743 sheep from United States for slaughter.  
New Zealand exports yearly about 5,000,000 carcasses of lamb and mutton.

Last November Swift & Co., Chicago, were reported to be freezing 25,000 sheep to supply their Winnipeg trade.

P. Burns, Calgary, states that 75 per cent of all sheep killed in his Calgary plant were from Montana, U.S.A.

Condemnations on cattle and swine year ending March 31, 1913:—

## CATTLE.

	Number of Carcasses.	Number of Condemnations.	Per cent Condemnations.
Killed carcasses.....	450,930		
Condemned for tuberculosis.....		2,080	55 p.c.
" other causes.....		1,700	45 p.c.
Total condemnations.....		3,780	100 p.c.
Portions—			
Condemned for tuberculosis.....		16,691	15.50 p.c.
" other causes.....		91,256	84.50 p.c.
Total condemnations.....		107,947	100 p.c.

## SWINE.

	Number of Carcasses.	Number of Condemnations.	Per cent Condemnations.
Killed carcasses.....	1,607,741		
Condemned for tuberculosis.....		2,155	70 p.c.
" other causes.....		938	30 p.c.
Total condemnations.....		3,093	100 p.c.
Portions—			
Condemned for tuberculosis.....		382,184	88 p.c.
" other causes.....		49,000	12 p.c.
Total condemnations.....		431,184	100 p.c.

The monetary loss on above is very difficult to arrive at.

One house in Toronto showed their loss on hogs to be around 5 cents per hog killed.

Another house situated in a district where the percentage of tubercular affected animals is very high gave their loss at 10 cents per hog killed.

The losses in Western Canada while not as high as Ontario and Quebec for tubercular affection, is high for other causes, and a conservative estimate would be, I think about 5 cents per hog killed, which would amount to about \$80,000.

No statistics available of losses on cattle.

Live stock receipts at sale yards in Toronto, Montreal and Winnipeg year ending December 31, 1913:—

#### TORONTO.

Cattle.	Sheep.	Swine.	Calves.
367,977	174,776	346,367	53,854

The calf receipts are equal to 12 $\frac{3}{4}$  per cent of all bovine animals or 1 to 7.

#### MONTREAL.

Cattle.	Sheep.	Swine.	Calves.
198,337	146,947	193,445	117,854

The calf receipts are equal to 37 per cent of all bovine animals or 1 to 1 $\frac{1}{2}$ .

#### WINNIPEG.

Cattle.	Sheep.	Swine.	Calves.
78,228	53,748	173,640	6,310

The calf receipts are equal to 7 $\frac{1}{2}$  per cent of all bovine animals or 1 to 13.

You will note the very heavy receipts of calves at Montreal almost equal to the cattle receipts but this does not begin to represent the thousands that are disposed of otherwise and goes a long way to help the shortage of the present and coming years.

Provincial killings for April 1 to November 30, 1913, and percentage of total slaughter:—

	Cattle.	Sheep.	Swine.
Ontario... ..	155,774	128,472	594,966
	37%	30 $\frac{1}{2}$ %	54%
Quebec... ..	164,085	138,466	214,711
	39%	33%	20%
Manitoba... ..	46,102	43,782	110,080
	11%	10%	10%
Alberta... ..	29,972	50,604	104,235
	7%	12%	9 $\frac{3}{4}$ %
Saskatchewan... ..	4,404	5,081	18,148
	1%	1 $\frac{1}{2}$ %	1 $\frac{1}{2}$ %
British Columbia... ..	16,700	32,272	50,785
	4%	8%	4 $\frac{1}{2}$ %
Prince Edward Island and Maritime..	1,474	20,478	8,466
	0.30%	5%	0.75%
Total.. ..	418,511	419,155	1,101,391

#### EXTRACT from the *Nor'-West Farmer*, January 20, 1913.

Cattle receipts at the Winnipeg stock yards for the past five years, with the average estimated prices per year, are as follows: In 1912, 101,044; 1911, 102,726; 1910, 190,517; 1909, 169,458; 1908, 170,088; at \$5.48 $\frac{3}{4}$ ; \$4.64 $\frac{1}{4}$ ; \$4.55 $\frac{1}{2}$ ; \$3.76 $\frac{1}{2}$ ; and \$3.53 per cwt., respectively. It is interesting to note that the highest prices each year have been in the month of July. It is also interesting to know that last year's average price is almost one dollar per cwt. higher than in 1911, and practically two dollars higher than in 1909. In spite of the falling off of 70,000 head since 1909, the total value of the cattle last year was \$193,870 more than it was three years ago.

Total value cattle for 1912.. ..	\$7,517,670
Total value cattle for 1911.. ..	6,448,269
Total value cattle for 1910.. ..	9,568,611
Total value cattle for 1909.. ..	7,323,800

## APPENDIX No. 17.

*Ottawa Journal, April 25, 1914.*

AVERAGE FAMILY PAYS \$30 PER ANNUM AS RESULT OF FIRES IN THE UNITED STATES AND CANADA.—FIRE WASTE, THROUGH INSURANCE TOUCHES THE POCKET OF EVERY MAN, WOMAN AND CHILD IN THE NATION—GREATER CARE ADVOCATED.

By E. ANDREW.

The following extracts from the stirring address of Mr. Franklin H. Wentworth, Secretary of the National Fire Protection Association, to the members of the Canadian Manufacturers' Association at Toronto, shows the great ravages of fire, how it effects every person in America and contains excellent suggestions for fire prevention and reducing fire hazard and insurance rates.

The awakening of a people to any great economic fact concerning their public or private welfare is always a matter of profound importance. The recognition by the people of the economic significance of the fire waste has been retarded both in the United States and Canada by an attitude of mind, bred by residence in a country of apparently boundless natural resources.

The Dominion of Canada has suffered frightfully in the matter of its standing timber.

A perforated water-pipe has evolved the automatic sprinkler, the best fire-fighting engine yet devised, and ten thousand reports of fires on the National Association records fail to show where sprinkler systems have failed to hold the blaze in check or extinguish it, unless there was something abnormal about the fire or some fault in the equipment or in the water supply. About eighty per cent of all these ten thousand fires on record occurring in properties equipped with automatic sprinklers were extinguished by the operation of ten sprinkler heads or less.

As the automatic sprinkler came into use the insurance companies began to grant liberal reductions for their installation.

It is obvious that insurance rates cannot be reduced irrespective of the loss ratio without forcing insurance companies who mean honestly to pay their losses, to retire. Capital invested in underwriting is not so irrevocably fixed as capital invested in public service corporations using public property or rights of way. Such investments can be controlled easily by the State, but capital invested in underwriting can easily seek other channels and withdraw when undesirable burdens are placed upon the companies, thus leaving the business world without the desired indemnity.

*Every one pays.*—Our waste of \$3 per capita per annum means that every man, woman and child in America pays three dollars per year for fire waste.

That means that the man with the average family, his wife and three children, a family of five, pays \$15 per year fire tax. The United States Government in its report adds to this fire waste the cost of maintenance of fire departments, which is as much more. This means thirty dollars per year for the average family.

Now, if on some blue Monday in every year a representative of the Government was to come around and ask each man for a cheque for \$30 to pay his share of the national carelessness, then he would realize what he is paying. Now we do not realize it because the tax is indirect.

The big manufacturers and merchants know that this fire expense is a tax. They equip their premises with automatic sprinklers. They put in protective apparatus.



They get the lowest insurance rate they can because it helps them to compete; but the man in the street, the ordinary man, does not know how this fire waste is paid, Take wool, for example. Wool in the warehouse is insured—that is a tax. It is insured in transportation, and there it pays a fire tax. It is insured in the textile factory where it is worked up into cloth. It is insured in the clothing, store, insured in the tailor shop, in the department store, and all the way along this fire tax is added to the cost, and when you buy a coat you pay it. Every stock of goods that is insured carries this tax, and it is passed along to the ultimate consumer. The masses do not know that they pay it. They do not realize that when they buy a hat, or a pair of shoes, or a suit of clothes, or anything which goes through the regular channels of industry, production, distribution and exchange, they pay a tax. Not realizing it they are indifferent to fire. They think fire does not affect them.

*Immense loss.*—The fire loss in the United States and Canada for the last ten years has averaged \$250,000,000 a year. What could you do with that? You could build roads, build canals, improve your harbours, build battleships—if you have no less mediæval use for your iron. You could do a great many things with \$250,000,000 a year. What does that mean? That means \$30,000 an hour, \$500 a minute; it means that every ten minutes we are burning the equivalent of a comfortable \$5,000 home. What country can stand a drain like that? Suppose we were to throw into the sea \$250,000,000 in wheat or corn or cotton, or lose \$250,000,000 out of our two national treasuries. Then we would realize that we were being impoverished by this waste. But we have lost the faculty of being moved by an ordinary fire. In Europe a \$100,000 fire shocks the entire country. All the papers in Continental Europe comment on it, wanting to know how it occurred, who was responsible for it, whether the conditions in the city where it occurred can be found elsewhere so that such a fire might be duplicated. But here in America, if we take up the morning paper and do not find two or three \$100,000 fires we think nothing has happened.

We are the most careless people with matches on the face of the earth. In Europe, if you want matches you have to go where they are kept. In America matches are everywhere; on our bureaus, in our desk drawers; on the mantle-piece, library tables; in all our old waistcoat pockets in the closet; if we wake up in the middle of the night and reach out and cannot find a match we feel insulted. Every match is a potential conflagration. There is no reason why any man who loves his family should have any match in the house except the match which lights only on the box. These strike-anywhere matches, if they are dropped on the floor and stepped on, will frequently ignite the skirts of women. This match is particularly dangerous to the child. The child is an imitator. He sees his older brother or his father or mother light a match. That is a dramatic thing. It is going to stick in his mind; he will remember it until he can get hold of one of these little fire sticks and see what he can do with it, and perhaps burn his little body.

*Indirect taxation.*—The fire waste touches the pocket of every man, woman and child in the nation; it strikes as surely but as quietly as indirect taxation; it merges with the cost of everything we eat and drink and wear. The profligate burning every year of \$250,000,000 in the value of work of men's hands means the inevitable impoverishment of the people. This fearful loss spread over the entire business world of America is beginning to manifest its impoverishing blight. The people feel it without yet being awake to its cause. Their awakening is retarded by the prevalence of the foolish notion that the insurance companies pay this colossal tax. But how could they, and remain solvent? They are mere collectors and distributors of that portion of this tax which is represented by their policies. Half of it they never touch; it falls upon the householder direct. San Francisco and Chelsea do not pay for themselves. The people of Canada and Massachusetts help pay for them. And next year San Francisco and Chelsea, risen from their ashes, may help



to pay for your cities and ours. There is one way in which we can escape the periodical paying for one another, and that is for us both to begin rational building construction and then protect what we have builded against fire.

The building of proper flues and chimneys is especially necessary in connection with residences. Then we must have a general revision throughout the country of our building codes. We must stop the building of a certain shoddy class of buildings, and we must limit the height of buildings. In Boston we limit them to 125 feet. I learn that in Montreal the limit is 130 feet. It is too late for a limit to be established in New York. New York is no longer a city; New York is a disease. The latest achievement in New York is a building of fifty-five stories.

They have recently established a fire college in New York where firemen from different parts of the country go to study. A couple of firemen from Philadelphia attending this college last week were asked this question: What would you do with a water-tower if a fire broke out in the fifty-fifth story of a building? One of the Philadelphians looked at the other and said "We are out of our class; we don't have to fight fire in Heaven in Philadelphia." A friend of mine in New York declares in all sobriety that on Manhattan Island a greater number of people travel greater distances vertically every day than horizontally. If anything like the earthquake in San Francisco were to occur and the people in downtown New York were precipitated into the street they would pile up four deep. However, they declare they are in no danger.

*Placing Blame.*—We must begin to place the responsibility upon the individual for fires. It is difficult to do that, I know, and yet it can be done. In France, if you have a fire and that fire damages your neighbour's property, you have to pay your neighbour's loss. That is very educative. It would be a very good thing if we had such a law in America. We can fix responsibility, however, and we can change our attitude of mind towards the man who has fires. When we look upon the man who has a fire as one who has done an unneighbourly thing; as one who is a public offender unless he can prove that he was in no way responsible for that fire; then we will have begun to make headway. We must have inquiry into the causes of all fires, not merely an inquiry into the fire which is suspected to be the work of some incendiary. Nearly every fire is the result of some carelessness, and the careless man must be held up to public criticism as a man who has picked the pockets of the rest of us because that is what it is in its last analysis. When we get fire marshals in every province who shall inquire into the causes of fires, I believe we will begin to correct our personal habits in respect to the things that cause fires.

## APPENDIX No. 18.

MEMORANDUM submitted through Major H. C. Blair on the subject of Steam Trawlers and the Fishing Industry in the United Kingdom, by Mr. George S. F. Edwards, of Smiths Dock Company, Limited, South Banks near Middlesborough-on-Tees, England.

MY DEAR BLAIR,—In further reply to your letter of the 17th February, I shall now proceed to answer the questions you ask me in this letter.

1. How is the fresh fish transported to the inland towns in this country?

When the fish is landed from the trawler at the fish market it is sorted according to class and quality on the floor of the market. The entire catch is then exposed to public auction, the bidders consisting of fish merchants who have customers in different towns throughout the country or who act as buyers for the large public institutions, such as workhouses, lunatic asylums, etc.

2. Transport of fish.

Immediately the buyers have completed their purchase they proceed to pack the fish, either in wooden boxes or in kits, or barrels. Most of the fish is gutted on the spot and is packed with intervening layers of crushed ice. The railway wagons are ranged up alongside the fish market, the floor of which is level with the floor of the railway wagons. We do not use refrigerated cars, as our distances do not necessitate this, what we use are specially constructed covered in fish trucks, the dimensions being 46 feet inside length, 7 feet 9 inches width, and 10 feet 10 inches height from ground to roof and 7 feet 3 inches height from the floor of the truck to the roof. At the principal fishing ports the railway companies run special express fish trains. Take Grimsby for instance, which is our fishing metropolis, indeed the fishing metropolis of the world. There are twenty-three fish trains despatched every day, seven of which are special express trains, these being drawn by specially constructed locomotives. These locomotives are of great boiler power, enabling a very high tractive effort to be maintained at high speeds. All other traffic gives way to these express fish trains except certain through passenger traffic on the main lines.

3. What is the margin of profit, showing whether the consumer has to pay a reasonable price or not. What benefits do the carriers reap, etc.

The price of fish in this country is regulated by supply and demand. The buyer on the market, or more correctly speaking, the distributing merchant, looks to a profit of 5 per cent on his turnover after paying all expenses of packing, railway carriage, etc., and it often happens, when there is a glut of fish, he has to take less. The fishmonger, that is the man who supplies the public, looks to securing a profit of 10 per cent on his turnover, certainly not less. This, however, depends on the locality in which his business is conducted; fishmongers in London, for instance, whose customers consist of wealthy families in the West End, derive very large profits. It is common knowledge, however, that the fishmonger's price does not vary with the price received by the owner of the steam trawler, in other words when there is a glut of fish and it is sold by auction at ruinous prices, the price of fish to the consumer is not proportionately reduced. On the other hand it is only fair to say when there is a scarcity of fish and prices rule high at the market the fishmonger's price is not raised, but the former happens more frequently than the latter.

Of late years a business has sprung up in our densely populated towns which has had a great effect on the fish trade in general; I allude to the business of the fish frier. These people have shops where certain kinds of fish are prepared and fried ready for

use in large quantities, and prove excellent and nutritious, as well as cheap, food for the working and poorer classes of the population. This trade of the fish frier has developed enormously of late years, and has proved a veritable backbone to our fishing trade, as it absorbs a large quantity of the poorer classes of fish which otherwise would have been a drug in the market, and at times unsaleable.

The difficulty to be contended with in a large and comparatively sparsely populated country like Canada, is that the towns are scattered over such a wide area, and in themselves do not represent a very large population, thus the cost of transit is a very serious consideration. On account of the long distances to be traversed, particularly in summer weather, it would hardly be possible to adopt the same principle of preserving the fish for transit as is adopted in this country, namely by means of crushed ice, which is quite sufficient to keep the fish in a fresh condition for the period occupied by carrying over any distance of this small country of ours; that being so I think it would be found necessary to introduce specially refrigerated fish trucks in your country.

With regard to the rates for carrying fish in this country, we will take Grimsby as the base and I give you a list of some of the rates from that port:—

*Cost of Carriage per Cwt.*

	Prime.	Coarse.	Smoked.	
Birmingham.....	2/3d	2/3d	1/9d	
Liverpool.....	2/3d	2/-	1/11d	(Reduction of 3d to 6d for 3-ton lots)
London.....	2/4d	1/6d	1/8d	(Reduction for 3-ton lots.).....
Manchester.....	2/-	1/9d	1/8d	“ “ “ “
Sheffield.....	1/7d	1/7d	1/7d	
Plymouth.....	3/6d	3/6d	3/-	
Dublin.....	4/9d	3/-	3/-	
Edinburgh.....	4/9d	3/-	2/6d	

You ask what became of the fishermen who operated the old sailing vessels; did they get employment on the steam trawlers?

In reply to this question I may tell you that the success of Grimsby as a fishing port is due to the fact that previous to steam trawling being introduced in the early eighties there existed a fleet of something like fifteen hundred sailing smacks working out of the port of Grimsby, and as steam gradually displaced the sailing smack, it was found that the crews of the sailing smacks were ideal men for working the steam trawlers, and when the evolution became rapid there was no difficulty to be faced in regard to finding crews for the steam trawlers, whereas in other ports which possess many greater advantages than Grimsby, geographical and otherwise, the one **great** obstacle to success has been the difficulty in manning the steam trawlers, thus the development of these other ports has been both slow and tedious.

I will now proceed to give you some interesting information regarding the port of Grimsby:—

There are 650 steam fishing vessels belonging to that port, and 50 new ones are expected to be put into commission during the present year.

The estimated quantity of fish landed by British vessels at Grimsby during 1913 was 179,226 tons, an increase over 1912 of 3,500 tons.

About 1,250,000 tons of coal are used annually by the fleet of steam trawlers.

200,000 tons of ice are used annually.

The average number of vessels landing their fish at Grimsby market each day is 68, while on January 6, 1913, no less than 124 vessels laden with fish entered the fish dock, the largest number on record for any one day.

The total quantity of fish carried by the railway company in one year was 170,000 tons, added to which there was 26,000 tons exported by the railway company's steamers plying between Grimsby and the Continent, making a grand total of 196,000 tons.

The fish trade of Grimsby requires 60,000 railway trucks annually.

The largest quantity carried by rail in any one day was 1,400 tons.

Of late years a new development has sprung up in the despatch of fish in small parcels direct to the consumer. Firms who are carrying on this business issue price lists of packages of various sizes and prices, composed of various kinds of prime fish, and a large number of consumers in this country derive their supplies direct from Grimsby. In one year 450,000 of these parcels, of an average weight of twelve pounds, and paying an average charge of 8d. each to the railway company were carried. In addition to these, there were large numbers sent by parcels post, amounting to many thousands.

The estimated number of packages of all sizes handled in one year by the railway company alone was 4,000,000.

The existing fish docks at Grimsby have a total water area of about 35 acres, which, however, is quite inadequate to cope with the trade. An additional dock, however, is in course of construction which will have a water area of 28 acres.

The covered-in fish markets where the fish is landed run to an area of 3,316 square feet, and there are about 500 merchants engaged in buying and despatching the fish to all parts of the country.

The capital invested in steam trawlers amounts to £3,500,000, and 6,000 men are employed directly in the fleet, whilst 50 per cent of the town's population is dependent on the fishery industry.

An enormous business is done at Grimsby in the salting and drying of cod, ling, etc., hundreds of tons being dealt with and prepared in this manner. The railway company have provided special facilities, and the area over which this class of fish is distributed is rapidly increasing.

A large business is done in the manufacture of cod liver oil, and all the offal is used for the manufacture of fish meal and fish guano, which is a very profitable business.

When you come to consider that the population of Canada scarcely exceeds that of London, and that the distance from London to our furthest away fishing port, namely Aberdeen, is inside of 500 miles, you will readily understand that in the present condition of the population in Canada the problem to be solved is a very difficult one. I mention London in particular, but our other large towns such as Birmingham, Nottingham, Leicester, Manchester, Leeds, and all the large towns in the cotton spinning area, the large colliery districts of this country are very large consumers of fish, but it is only within the last twenty years that fish has been recognized in this country as a cheap and nutritious diet for the working classes. Previous to that it was looked upon more as a luxury to be enjoyed by the wealthier classes of this country.

Yours sincerely,

(Sgd.)

GEO. S. F. EDWARDS.

March, 14, 1914.



## APPENDIX No. 19.

Statement No. 1, showing wholesale quotations for Spring Wheat Flour, Bakers' Grade (Second Patents) at Chicago, Montreal, Toronto, Ottawa, Liverpool and London during the months of November and December, 1909:—

Chicago, per barrel.....	\$ 5 60
Montreal, per barrel.....	5 20
Toronto, per barrel.....	5 10
Ottawa, per barrel.....	5 10
Liverpool, per barrel.....	5 04
London, per barrel.....	5 20

NOTE.—The Montreal quotation includes delivery to buyer; the Toronto and Ottawa quotations are f. o. b. cars.

Statement No. 2, showing wholesale and retail prices of bread in the above-mentioned cities during the months of November and December, 1909. (The wholesale price is given first; the retail price second):—

	Price of Loaf.	Weight of Loaf.
	Cts.	Oz.
Chicago.....	4	14
".....	5	14
Montreal.....	6½	20
".....	8	20
Toronto.....	4	16
".....	5	16
Ottawa.....	9	32
".....	11	32
Liverpool.....	5	32
".....	6	32
London.....	5½	32
".....	6½	32
Price per 100 ounces—		
Chicago.....	28.57	
".....	35.71	
Montreal.....	32.5	
".....	40.0	
Toronto.....	25.0	
".....	31.25	
Ottawa.....	28.12	
".....	34.37	
Liverpool.....	15.62	
".....	18.75	
London.....	17.18	
".....	20.31	

It is difficult to make a fair comparison of prices of bread in different cities because of the fact that it is the weight of the loaf and not the price which is affected by its quality. All loaves are sold at the same figure but the better the quality the lighter the loaf. In the above table a considerable difference is shown in the price of bread in Montreal and Toronto. The Montreal loaf which is used in the table is supposed to weight 20 ounces but, as a matter of fact, loaves labelled with this weight frequently weigh more, the overrun sometimes amounting to 8 ounces. In Ottawa the actual weight of the loaf usually corresponds with the stamped weight. Whether this is the case in Chicago, Liverpool and London I do not know.



## COST OF MATERIAL TO THE BAKER.

In ordinary straight breadmaking the cost of the ingredients, other than flour, used in baking one barrel of flour is about as follows:—

1½ pounds yeast at 30c. per lb.	45 cents.
3 " lard at 17c. per lb.	51 "
3 " sugar at 4½c. per lb.	14½ "
2½ " salt at 1c. per lb.	2½ "
	<u>\$1 13</u>

If we add to this amount the price of the flour per barrel we get the cost of the material to the baker in each city as follows:—

Chicago	\$5 60 + \$1 13 = \$6 73 per barrel.
Montreal	5 20 + 1 13 = 6 33 "
Toronto	5 10 + 1 13 = 6 23 "
Ottawa	5 10 + 1 13 = 6 23 "
Liverpool	5 04 + 1 13 = 6 17 "
London	5 20 + 1 13 = 6 33 "

NOTE.—I have used the same estimate of cost of ingredients, other than flour, for all the cities mentioned, but I think the cost of sugar, lard, yeast and salt would be from eight to ten cents less per barrel in Liverpool and London than in Canada or the United States.

One barrel of flour (196 lbs.) will take up about 115 pounds of water and the lard, sugar, salt and yeast about 10 pounds more, making in all about 321 pounds of dough. Allowing 2 ounces per pound for evaporation during baking would leave about 280 pounds of bread per barrel, equal to 140 2-pound loaves.

This quantity of bread at the wholesale prices quoted in the table in Statement No. 2 gives the following return per barrel of flour:—

Chicago	280 lbs. bread at 28½ cts. per 100 oz.	—\$12.76
Montreal	280 " 32½ cts. "	—\$14.56
Toronto	280 " 25 cts. "	—\$11.20
Ottawa	280 " 28 cts. "	—\$12.54
Liverpool	280 " 15½ cts. "	—\$6.94
London	280 " 17 cts. "	—\$7.61

The baker's gross outlay for material and his gross receipts from the sale of bread, per barrel of flour manufactured, stand, therefore, as follows:—

City.	Cost of material per brl. of flour baked.	Receipts from bread per brl. of flour baked.	Gross profit.
	\$ cts.	\$ cts.	\$ cts.
Chicago	6 73	12 76	6 03
Montreal	6 33	14 56	8 23
Toronto	6 23	11 20	4 97
Ottawa	6 23	12 54	6 31
Liverpool	6 17	6 94	*0 77
London	6 33	7 61	*1 28

\*Should probably be 10 cents more for the reason stated in note given above.

Out of the gross profit shown above the baker has to pay wages, rent, fuel, cost of delivery, interest, etc. If a better grade of flour is used than "Strong Bakers," which I have quoted throughout, then of course, the profit shown above would be lessened. That would hold good, however, with the Old Country baker as well as with the baker on this side of the water, and it is evident, therefore, that the baker in England works

on a much smaller margin than his confrere in Canada or the United States. The margin of the Liverpool baker appears to be so small as to preclude any chance of profit, but it must be remembered that the volume of his business is very great. For instance, one firm of bakers in Liverpool have a capital of \$500,000, own fifty-seven shops from which they sell bread wholesale and retail and also deliver from house to house by hand barrow. Another firm has seventy-five shops, another forty, and another thirty-five.

Everything considered the gross profit shown for bakers in Chicago, Montreal, Ottawa, and Toronto seems excessive compared with the Liverpool figures, and it would appear as though the householder in this country would find it profitable to make bread at home. It would cost less and the bread would probably be more wholesome.

(Signed) W. W. MOORE,  
*Chief, Markets Division.*

Ottawa, January 20, 1910.

## APPENDIX No. 20.

## THE HIGH COST OF LIVING.

## A CONSUMER'S AND A MILLER'S VIEWS ON THE QUESTION.

The two letters following appeared in recent issues of the Standard (Montreal). They give two distinct views on the high cost of living problem as affected by the milling industry. We invite further discussion on the questions raised in these letters from our readers.

SIR,—Whatever transient distractions claim the monetary regard, the one subject of permanent anxiety to our population, whether in Montreal or elsewhere, is the high cost of living.

Rent, food, clothing,—the three economic essentials in urban centres which have been soaring for the last ten years,—show no ameliorative symptoms, and thousands of families in Montreal and elsewhere, desiring decency of life and environment are compelled to resign themselves to untoward physical conditions which deny the faintest intimation of beauty, and render virtue itself well nigh impossible.

The Government was appealed to. Every political economist knows that you cannot legislate against a tendency. Hon. Mr. R. Borden says, "you can have a commission; but this Government does not promise solution."

This special commission has been meeting in the great centres of population, holding their sessions in camera which, doubtless, was desirable, inviting confidential views from the leaders on commerce and making note of the general conditions in the communities they visited.

The other day, Hon. W. T. White, the Minister of Finance, told a deputation of the milling interests that the people of this country did not relish the idea of their charging them more for their domestic flour than they charged for the exported.

That, perhaps, did not arrest the general attention; but an examination of the circumstances of the case stamps the remark with great significance.

Many causes contribute to the high cost of living and these are, for the most part, recondite and elusive. Explanations have been many and ingenious, nor must we forget that it has been stated, that one of the causes of the high cost of living is that Mrs. Brown is too proud to go to Bonsecours market with her basket, or carry her fowls with their heads dangling on the sidewalk. The remark, however, of the Hon. Mr. White led the writer to make inquiries, with the result that it can be shown unequivocally that the milling interests of this country are by their discrimination against our people, furnishing a most potent cause of the high cost of living.

The answer of the milling interests to the charge of the Hon. Mr. White was twofold; first, the Canadian people would not eat the inferior grades which they exported; second, the export business did not pay, was indeed conducted at a loss. Both statements are untrue. The highest grades of flour are exported to England and sold at from \$1.50 per barrel less than the price charged Canadians for a similar article. Second, The Ogilvy's, the Lake of the Woods, the International Milling Company have, according to their published record, made last year profits from 30 to 60 per cent upon their capital.

In respect to the character of the flour, here are the grades and prices: Top grade, \$4.50 in Winnipeg; \$5.10 in Montreal; \$4.18 in London. Patent, \$4.80 in Winnipeg; \$4.90 in Montreal; \$4.06 in London. Bakers, \$4 in Winnipeg; \$4.10 in Montreal; \$3.60 in London. That is to say, Canadian flour produced at our door, so to say, is

carried across the continent, transported over the Atlantic and sold in London after paying all the freight charges, at \$1.50 per barrel cheaper than a similar brand is sold to the Canadian people themselves. This is surely an extraordinary state of affairs considering that the quality of civilization is bread rather than roots, and that flour is our greatest staple, the seriousness of the discrimination involved is at once apparent. It affects every family in the Dominion. It brings every workingman measurably nearer the ragged edge of poverty over which the implacable rigours of economic science have been holding him. It means to 7,000,000 people that owing to this discrimination they are penalized to suit a business of which the profits are 60 per cent per annum. It is not pretended that this discrimination accounts, by itself, for the high cost of living, but it is a potent factor. It is a contributory cause and that not in any remote way, but directly, immediately, practically.

If we consider to what an extent flour as a staple food enters into the living of every family in the Dominion, one can easily estimate the bearing of this discrimination upon the general conditions of living. We sometimes read in respect of liquor or tobacco, that innocent citizen Brown is credited with so many gallons or pounds per annum, as the case may be. That is illustrative, but Brown does not feel it. It is per capita calculation; but it does not mean that Brown in the concrete knows the taste of Scotch from Bovril.

In this case, however, every family in the Dominion is an immediate sufferer by the discrimination to the extent of every barrel of flour it uses in the year. Unquestionably this, in its totality, would furnish one of the causes contributing to the high cost of living. One wonders if the Royal Commission has considered this matter. It calls for investigation—the more so as the milling interests have denied the plain and incontrovertible facts in the connection.

Even Professor Leacock, keen economist as he is, could not marshal all the contributory causes of the present cost of living; but the simplest can understand that if you make the Canadian people pay \$1.50 per barrel more for a necessity of life than you do other people three thousand miles away you are by that amount making living dearer to every person affected by the added charge.

Here, then, is something plain and unmistakable, which the commission can grasp, without fear that it will elude the pursuit or dissolve in economic ambiguity. This is something which you can put handcuffs on—if necessary.

## CANADIAN CONSUMER.

### THE MILLERS' SIDE OF THE CASE.

SIR,—In your issue of April 4th you published a letter signed, "Canadian Consumer."

That "Canadian Consumer" was neither competent nor truthful in his statement regarding the price of flour is shown by his own letter and to put it plainly, he was mistaken when he says that the statements made by the milling interests to the Hon. Mr. White "were untrue" and that "the highest grades of flour are exported to England and sold at \$1.50 per barrel less than the price charged Canadians."

His own letter proves that what the millers told Mr. White was true, that the critics were comparing the price of top grade flour in Montreal with low grade flour in London, England; as he says: "Top grade, London, \$4.18, Montreal, \$5.10; Bakers', London, \$3.60," which is the lowest grade he quotes and you will note is just \$1.50 per barrel less than he claims top grade sells for in Montreal. In other words, he is comparing in London the price of the lowest grade he quotes with the price of the highest grades he quotes in Montreal.

"Canadian Consumer" No. 2, whose letter you publish in a subsequent issue, goes the "Canadian Consumer" one better in uttering a libel on the Canadian Mill-



ing Industry when he says that the Canadian people are penalized "to the extent of \$1.71, for that is the exact amount, per barrel, upon every barrel of flour they purchase in the year and that he can corroborate his statement from the official figures."

That you, Mr. Editor, may place before your readers the exact facts concerning this question, I give you herewith the actual average prices at which the flour of one of our largest milling concerns in Canada was sold during the month of January last just before the deputation of millers waited on the Hon. Mr. Borden:—

"Top Patent," \$5.18 Montreal freights; Great Britain, not a barrel.

"2nd Patent," \$4.59 Montreal freights; Great Britain, \$4.39.

"Blended Spring Wheat Flour," \$4.51 Montreal; Great Britain, \$4.26.

"1st Clears," \$3.91 Montreal; Great Britain, \$3.51.

"2nd Clears," \$3.19 Montreal; Great Britain, \$3.51.

Apparently the "2nd Patent" of which only 19½ per cent was exported to Great Britain, sold at 20 cents a barrel there less than in Canada, but, in fairness to the mill, 20 cents per barrel should be deducted from the above price on the flour sold in Canada, being the extra cost of selling in the domestic market over selling for export. A cable costing 50 cents or \$1 sells anywhere from 200 to 20,000 sacks of flour and the miller simply has to load his flour on the car or boat, attach his bill of lading to the draft and the transaction is complete without any additional expense or risk of loss. In selling in Canada, however, it is necessary to keep expensive travellers on the road all the time under heavy expense, the sales run from five bags upwards and the buyers often cancel the orders before the flour is shipped, or refuse the flour when it arrives, or more frequently still ask the miller to hold it for a long time after date for shipment is passed; all of which means additional cost to the miller in selling. But the above are not the worst items, because flour, being sold on time here, bad debts are not infrequent and the miller sometimes has to take 25 cents, 50 cents, or 75 cents on the dollar and occasionally nothing at all, and may lose at times several thousands of dollars on one customer.

More unbusiness-like still is the custom of some millers in selling their flour to guarantee the buyer against any drop in price which occurs before the flour is shipped, sometime in the future, and I have known millers to lose over \$1 per barrel by this one-sided "Heads you win, tails I lose" arrangement.

From the above figures you will see that none of the Top Patent was sold in Great Britain. The net price to the mill of the "Second Patent," after deducting the 20 cents, was \$4.39 Montreal, the same as in Great Britain. On the "Blended" the price is 5 cents less in Great Britain, but on the "1st Clear" it was 31 cents, and on the "2nd Clear" 52 cents higher in Great Britain than Montreal freights.

Of the "Blended" and "1st Clear" flours 73 per cent went to Great Britain, and of the "2nd Clear" 80 per cent was exported, because the Canadian people did not use these qualities of flour. You will note that the "1st Clear" was sold 31 cents cheaper and the "2nd Clear" 52 cents cheaper in Canada than abroad, because Great Britain, being the big consumptive market for these grades, the surplus which could not be sold abroad without breaking the market was sacrificed in Canada and sold largely for feed and similar purposes, just as the surplus of the higher grades are sacrificed abroad when a market can not be found for them here.

The Ontario mills do sell their winter wheat Patents in Great Britain and the prices were \$4.43 in Great Britain as against \$4.30 in Montreal. This, of course, means that the Ontario mills are making a loss on their export flour, but nothing else can be expected when the ocean freight rate to Glasgow all last fall and winter averaged 10 per 100 pounds more on Canadian flour than the Glasgow miller had to pay on the Canadian wheat, and the Canadian mills had to sell their flour in competition with the British mills' flour, which made a saving to them of 20 cents per barrel on ocean freight alone.

As 171,300 tons of mill offal "bran and shorts" were secured from the flour exported by Canadian mills in 1913, it will be seen that the milling of flour in Canada



is of vital importance to our farming community as they will be deprived of this enormous quantity of feed if the export of our flour is killed by discriminating freight rates against it and will result in a further increase in the high price of meat and dairy products.

That Manitoba wheat is sold cheaper abroad than to the Canadian millers is plainly shown by the fact that although the freight on grain was so much lower than on flour at the last annual meeting of the Grain Growers' Grain Company, which is composed entirely of farmers, the president stated that the export end of their business showed a loss of \$200,000 since their last annual meeting. He also reported that after wiping off a loss of over \$300,000 on the elevators leased from the Manitoba Government, that they had made a profit of about \$165,000. This must have been largely made out of the eastern millers and consumers and would be about 25 per cent on the paid up capital of the Grain Growers' Grain Company, and is not an excessive return on the enormous amount of grain they handle.

The statement of "Canadian Consumer No. 2," that the flour mills made from 30 to 60 per cent profit is incorrect, as I have been furnished with the exact profits made by more than one of our big milling companies during the past two or three years, and they figure out as nearly as possible  $7\frac{1}{2}$  per cent on the capital invested. The average profit made was about  $14\frac{1}{2}$  cents per barrel on their output, which no one would say was an excessive profit, and is in marked contrast to the claim of, "Canadian Consumer No. 2," "that the milling interests are penalizing our Canadian people to the extent of \$1.71 per barrel for every barrel of flour used the year round." It is well known that some of the big milling companies have a large number of interior elevators and do a general grain business, some of them often conducting other lines of business besides flour mills, and it is the profit made on the grain business or in other ways, like the profit made by the Grain Growers' Grain Company on their business, which added to the  $7\frac{1}{2}$  per cent profit on the average which the flour milling shows that goes to make up the total percentage of profits which their official statement shows. The buying and selling of grain or speculating in grain is not the business of flour milling.

Not long ago an examination was made of the yearly statements of over fifty Ontario flour mills doing a shipping business covering a period of three years, and it was found that their average profits were only  $1\frac{1}{2}$  per cent on their yearly turnover. It is questionable if there is any business in Canada which shows such a small return as the milling business.

CHAS. B. WATTS.

*Secretary The Dominion Millers' Association.*

Toronto, April 30, 1914.

In a recent issue of the *Gazette* (Montreal), the following letter from Mr. W. A. Black, Managing Director of the Ogilvy Flour Milling Co., Ltd., appeared, answering the one reproduced above from "Canadian Consumer":—

SIR,—Under the above heading a Montreal paper has recently published a number of letters by anonymous writers, and it is not surprising that they have not signed their names to these letters, because their statements are not only untrue, but very ridiculous. It will be sufficient to analyze the statement made by "Canadian Consumer" in an article of April 4th. This writer credits the mills with having made the following statements to the Hon. Mr. White, and characterizes them as untrue:—

1. That the Canadian people would not eat the inferior grades which are exported, and,

2. That the export business did not pay and was conducted at a loss.

In the first place, the statement made to Hon. Mr. White was to the effect that the Canadian trade demanded a higher average quality of flour than the millers were in

the habit of exporting, and that the great bulk of the flour exported was of intermediate and lower grades.

I think the business of this company may be taken to cover the average condition of other spring wheat millers in Canada, and as an offset to this bald statement of untruthfulness on our part, I would simply say that in our business year which ended on August 31st last, of our total exports of flour to Europe in that year less than 10 per cent was of the highest quality that we sell in Canada, and that over 80 per cent of the exports consisted of 4th, 5th and 6th grades, which substantiates the statements made to Hon. Mr. White, and I might add that the higher grades are only sold for the reason of assisting to sell the lower, or for the purpose of keeping the mills running to supply the local trade with offal (bran and shorts) that was required in our own country.

In regard to the second statement, I may say that when this letter was written on the 4th April, No. 2 Northern wheat was worth in store, London, \$1.07 per bushel, which at the average allowance for making a barrel of flour (4½ bushels) would mean \$4.81, so that it can readily be seen that the cost of the wheat alone would be greater by 63 cents than the price quoted by the writer as that for a Top Grade flour in London, namely, \$4.18. By his own statement of prices, therefore, he clearly proves that he is wrong and that the statement of the millers in this connection is correct.

The next statement is that Canadian flour is being carried across the continent and transported over the Atlantic and then sold in London at \$1.50 per barrel less than the same grades are sold for in Canada, and he attempts to prove it by prices which, as far as this company's business is concerned, are absolutely incorrect. But, taking his own figures, observe the serious discrepancy. He describes flour as being carried across the continent, and, although Winnipeg is only half-way across from Montreal, it is the farthest point named, and we will take the price he quotes in Winnipeg as against what he quotes in London, as follows:—

Top Grade—\$4.50 Winnipeg, \$4.18 London. (Note—the difference is 32 cents.)

Patent—\$4.80 Winnipeg, \$4.06 London. (Note—the difference is 74 cents.)

Bakers—\$4.00 Winnipeg, \$3.60 London. (Note—the difference is 40 cents.)

And through these figures he attempts to prove that these grades of flour are being sold in London at \$1.50 per barrel cheaper than the same brands are sold to the Canadian people. He must surely attribute to readers a serious deficiency in the knowledge of mathematics, but even by the prices he has presented (which are quite incorrect) he most effectually disproved his own statement that flour is sold at \$1.50 per barrel cheaper in England.

His fourth and final statement is: "The Ogilvy, Lake of the Woods, and International Milling Companies, according to their published records, made last year, profits from 30 per cent to 60 per cent upon their capital."

I cannot make any statement as far as the International Milling Company is concerned, for their business is a combination of two moderate-sized mills in Canada with some larger mills in the United States, but, as far as the purely Canadian mills are concerned, I fail to find a record of any such profit.

Applying, however, the more modest figure he mentions, namely, 30 per cent to the business of this company with a capital of \$6,250,000, it would mean a profit of \$1,875,000. Any one can consult the published statement of this company for the last year which he quotes as his authority, and they will find the profits for the year to have been \$596,734.80—a trifling difference of \$1,298,265.20, or not one-third of the lowest amount he claims is being made. As a matter of fact, the earnings on the capital invested were a little less than 9½ per cent instead of 30 per cent. Had we used the larger figure of 60 per cent the profits would have amounted to \$3,750,000 in place of the actual earnings of \$576,734.80—a difference of \$3,173,265.20. While on the subject I might further state that the average of the last three years makes the profits some \$50,000 less than they were in 1913, and the average earnings on the capital invested less than 8½ per cent.

I think the foregoing is sufficient to convince any fair-minded person that the earnings of the milling companies are not excessive; and that the writer of the article in question is not qualified to act as a director of public opinion.

That we are forced to sell our flour for export on a basis of lower prices than the highest prices received at home, however, is not denied. In fact, coming back to the statement made to the Hon. Mr. White by the millers, it is exactly what they claimed, and to any one conversant with the export business in many manufacturing lines this condition in the milling business is by no means unique. The fact is that no mill can possibly run exclusively on export business and remain solvent; but the great bulk of the flour exported to the larger markets of the importing countries of the world is of a grade and character for which the miller cannot find a market in his own country; and in order to supply the consumer at home with the flour he desires, he is forced to take the best price he can obtain in such countries in competition with all the surplus shipping countries of the world, such prices in turn, together with that obtained for the offal, regulating the price at which he can sell such of his product as is required in his own country. He is at times forced to sell some of the higher grades in order to supply the extreme demand for offals at certain seasons of the year in his own country, for without a reasonable supply of same he would be unable to secure orders for flour, the preference by the buyer being naturally given to the firm who can give him what he actually requires.

While these writers have kept to the subject of flour, they have not said anything about the by-products, which have been sold steadily at lower prices than they were selling at elsewhere. Take, for instance, the matter of bran: Canadian spring wheat bran has been straight along at as much as \$7.50 per ton, higher in the United States than on the Canadian side of the line in the same locality, and as each dollar per ton is the equivalent of  $3\frac{1}{2}$  cents on the barrel of flour, it really makes a difference in round figures of 25 cents per barrel. This plainly indicates how keen the competition is between the six hundred odd Canadian mills for the home business; otherwise these extraordinary differences would not be evident. The Canadian trade quotations are invariably the extreme prices for small quantities, including delivery, which in many instances involves cartage for many miles from the mills, and in conjunction with such prices there must also be considered the cost of selling, and the not infrequent loss from bad debts. As against this the cable quotations are generally those of cost on vessel at point of quotation for large quantities and for which the terms of payment are cash.

Frequent reference has been made by these writers to the question of ocean freights, and it is quite true that the millers think they are discriminated against in the matter of freight on wheat as compared with flour. Some years ago the difference ran as low as about  $1\frac{1}{2}$  cents per 100 pounds more for flour than for wheat, the average for a number of years being in the neighbourhood of 2½ cents. Within the past year or two, however, this difference has greatly widened to from 3 to 8½ cents per 100 pounds, which makes competition on a profitable basis on current values of wheat entirely out of the question. We are quite aware that there is a difference in the cost of handling flour as against wheat, but we feel that the difference charged is more than the actual cost. The mills are indirectly very good customers of the steamship companies on west-bound business, as much of their supplies (notably jute for the manufacture of bags) is imported from the other side, and not unnaturally feel that they are not fairly treated. That the steamship owner is entitled to a profit just as much as the miller, goes without saying, and if the rates on grain do not permit of a profit, then they should be increased, and not kept down at an unprofitable figure, and the loss recouped at the expense of the flour.

It may be of interest to state that the present milling capacity of Canada is 37,500,000 barrels of flour per annum—sufficient to grind the present entire wheat crop of Canada less the wheat used for seed, but that they do not grind one half, and largely for the reason that the difference in freights makes it impossible to do so without loss.



## WHY IS CANADIAN FLOUR CHEAPER IN BRITAIN THAN HERE?

By J. A. DAWSON.

Mr. W. Hutchison, Vice-President, and Mr. R. Neilson, Asst. Secretary of the Lake of the Woods Milling Co., Ltd., granted an interview on June 18th, to the *Canadian Miller and Cerealist*.

"What have you to say, Mr. Hutchison, as to the charges brought against the Canadian miller that he sells his product more cheaply in foreign markets in general and in the British market in particular, than he does to consumers in this country?"

"To answer that question fairly and fully requires a knowledge of several important facts in the export business; and in addition to that an understanding of the demand of the consumer in Canada."

"The Canadian consumer demands a higher average quality of flour than the millers are in the habit of exporting, and the great bulk of our flour that is sent abroad is of an intermediate grade. I may say that taking the business of this company as an indication of the average conditions obtaining in the spring wheat milling industry in Canada, it will be found from a perusal of the data gathered from the business conducted by this company during recent months, that of our total exports of flour to Europe, practically none was of the highest quality that we sell in Canada; while over 80 per cent of the exports consisted of 2nd, 3rd, 4th and intermediate grades. Such higher grades as are sent abroad are exported for the purpose of assisting to sell flour of lower quality, as some dealers demand a certain proportion of several grades. In addition to that, we push our export trade for the purpose of keeping our mills running to full capacity, so that we may reduce the average cost of production per unit of output and in addition supply the local trade with offal, which is so necessary for mixed farming in Canada."

## ONLY PARTIALLY TRUE.

"Some statements are appearing in the press to the effect that Canadian flour is being carried from the West and shipped to Europe to be sold at a very much lower figure in London than the same grade brings in Canada. This is true, but not by any means to the extent indicated by recent writers in the press."

"I have compiled the following figures, Mr. Hutchison, and would like to have your opinion as to whether they may be taken as representative of average prices:—

GRADE.	DOMESTIC.		EXPORT.
	Listed.	Return.	
	\$ cts.	\$ cts.	\$ cts.
First Patent.....	5 50	5 30	No. q'n.
Second Patent.....	5 00	4 60	4 10
Mixed Grades.....	4 80	4 50	4 00
First Clear.....	4 00	3 95	3 70
Second Clear.....	3 30	3 25	3 27

"Yes, they are probably as near the mark as you could get, and it will be seen that these various grades of flour were actually sold at a lower price in the United Kingdom than at home. But it must not be forgotten that it costs a great deal more to sell flour in Canada than abroad. A cable costs from 50 cents to \$1, and yet by means of it flour may be sold to the extent of from 200 to 20,000 sacks, and all that the miller has to do is simply to load his flour on the boat, attach his bill of lading

to the draft, deposit all the documents with his banker, and regard this transaction as completed without any additional expense or risk of loss. Practically at that point the foreign buyer has the flour and the Canadian miller has his money. In selling at home, however, it is necessary to keep a force of travellers all the time on the road under heavy expense. Individual sales may range all the way from five bags upwards; and the mills may have extra expense arising from cancelled orders. At times, too, the companies are asked to hold flour for a long time after the date for shipment is passed, all of which plainly means additional selling cost.

"But that is not the worst feature of the situation. While the flour is sold in England for spot cash and the miller does not have to wait a day for his money, once the flour is placed on board the cars, he very often, on the contrary, is obliged to wait for payment in Canada, and sometimes suffer heavy losses from bad debts.

"Practically none of highest quality of flour (Top Patent) is sold in Great Britain. Of the lower grades most of the output of Canadian mills is sold abroad, very little of it being used for home consumption. As a matter of fact, these grades are on the average sold cheaper in the United Kingdom than in this country; but, at times, one or other of them sells for less in Canada than abroad, because Great Britain, being the big consuming market for such flour, the surplus is disposed of in Canada if there is any risk of breaking the market by exporting the flour abroad.

#### A LEASE OF COMPETITION.

"It should be perfectly clear to every one concerned why such grades of flour must be sold more cheaply abroad than at home. In England, we come in competition with the producers of the world. We must, therefore, compete with these producers on equal terms, and to do so the price must be cut very fine. This export trade is a benefit to both the manufacturer and the consumer at home because it helps to keep the mills running and to reduce the cost of manufacture. Thus the miller sells at a lower price at home than he could otherwise do, and, moreover, the home market is supplied with bran and shorts, which are so necessary for dairying and mixed farming. Without this export trade, the mills could not supply sufficient feed to take care of home requirements. It is estimated that farmers would pay \$7 more per ton for feed if it were not for the export trade in flour. It is easily seen that the milling of export flour in Canada is of vital importance to our farming community. If we were deprived of this export trade, our farmers would lose an enormous quantity of feed, and this would be a very serious matter indeed for the basic industry of this country. If our farmers could not get bran and shorts in such quantities as they require, our cattle industry would decline, with the consequence that higher prices of meat and dairy products would prevail.

"I maintain that, for the reasons stated, our export business, which brings cheap flour to the English consumer, also brings indirectly relatively cheap flour of the highest grade to the homes of Canada.

#### BEST QUALITY AT REASONABLE PRICE.

"Surely I do not need to emphasize the fact that increased production means lessened cost per unit, and hence also lower prices per unit through the additional competition for the same markets. It is because we can dispose of our cheaper quality of flour that such flour as is wanted in Canada can be sold at a reasonable price here. The Canadian consumer, as I have pointed out, does not seriously compete with Europe for the lower grades, hence we must look abroad for market for these products. But the best quality of flour is offered to the Canadian housewife at a fair and reasonable price. The following statement substantiates the truth of these statements:—



Relative cost of production and saving between running mills half capacity and full capacity with benefits to the public as well as to the miller in the larger production:

Output:	100,000 brls.	200,000 brls.
Cost, manufacturing and selling per barrel . . .	\$0 75	\$0 50
Total cost per barrel . . . . .	4 80	4 55
Selling price per barrel . . . . .	5 00	
Profit per barrel . . . . .	0 20	
Gross profit . . . . .	\$20,000 00	
Sold as follows:	Domestic.	Export.
	130,000 brls.	70,000 brls.
Cost, manufacturing and selling per barrel . . .	\$0 50	\$0 50
Total cost per barrel . . . . .	4 55	4 55
Selling price per barrel . . . . .	4 85	4 35
Profit per barrel . . . . .	0.30	loss 0.20
Gross profit . . . . .	\$39,000	" 14,000
Net profit . . . . .	\$25,000	
Gain to mill on increased production . . . .	\$ 5,000	
" " public on reduced prices . . . . .	\$19,500	

"It must not be forgotten that the British miller occupies a strategic position in competing with foreign producers of flour. He does not depend upon Canada alone for his wheat, but brings it from India, Egypt, Russia, Australia, the Argentine Republic and other countries. He has developed the most remarkable skill in blending various qualities of wheat and flour so that a shortage of supply in one country, unless it makes serious inroads upon the total world's supply, means little to him. On the other hand in Canada, our millers depend upon wheat of a grade and quality which varies little from year to year. They have educated the consumer to demand a certain standard of flour, a flour which depends for its high qualities upon the careful milling of the superior wheat which is produced in Canada. If, then, the supply falls off in the home production of wheat, Canadian millers cannot make that deficit good by mixing other qualities with the home product.

#### STILL ANOTHER HANDICAP.

"In addition to these advantages, the British miller pays less for his labour machinery, and less for his capital. In England, capital can be secured as a rule at 4 per cent, while in Canada 6 per cent to 7 per cent is the ordinary rate. Moreover the British miller pays less for his jute, out of which the sacks for the flour are made. And what is more to the point the British miller is right in the centre of the biggest market of the world.

"While critics of the flour milling industry have said a great deal about the price of flour, they have said little or nothing about the by-products which have been selling steadily in Canada at lower prices than obtained elsewhere. Take, for instance the matter of bran: Spring wheat bran has been selling as much as \$7.50 per ton higher in the United States than in Canada. Each dollar per ton increase on bran is equivalent to a reduction of 3½ cents on the barrel of flour, so that this really makes a difference, in round figures, of 25 cents per barrel. This plainly indicates how keen the competition between the 600 odd Canadian millers is for the home business. The Canadian list figures are invariably the extreme prices for small quantities including delivery, which in many instances involves cartage miles from the mills, and do not by any means represent the average price received. For instance the flour listed at \$5 per barrel will give an actual return on the average, say, of \$4.60 in the domestic

market on account of cash discounts, etc. The export return for the same flour is, say \$4.10. But it should be remembered that the cost of marketing an export barrel of flour is 20 cents less than for marketing a barrel of domestic flour.

## OCEAN FREIGHT RATES.

"This brings us naturally to the question of ocean freight rates. It is quite true that the millers are discriminated against in the matter of freights on wheat, as compared with flour. Some years ago, the difference ran as low as  $1\frac{1}{2}$  cents per 100 pounds, but the average for a number of years has been in the neighbourhood of  $2\frac{1}{2}$  cents. Within the past year or two, however, this difference has greatly widened; it has ranged all the way from 3 cents to  $8\frac{1}{2}$  cents, and even 12 cents per 100 pounds, which makes competition with British producers on a profitable basis with current value of wheat entirely out of the question.

"It is quite true that there is a difference in the cost of handling flour as against wheat, but we feel that the difference charged by the carriers is disproportionate. However, the mills bring business to the steamship companies for westbound traffic since much of the millers' supplies, notably jute for the manufacture of bags, is imported from Great Britain or India. The steamship owner is entitled to a profit just as much as the miller. If the rates on grain cannot be definitely fixed on account of competition among tramp steamers, and the general exigencies of shipping conditions, then the rates on flour should be made flexible, in order not to discriminate against export flour or grain.

"The statement that the flour-mills make excessive profits is incorrect. If critics would take the trouble to examine the annual financial statements of the representative flour-milling companies of Canada, they would discover that the average profits made during 1913 on the capital employed were only reasonable. It is a well-known fact that some of our big milling companies have a large number of interior elevators and do a general grain business, some of them even conducting other lines of business besides flour-milling, and it is the profit made in these enterprises which, added to the returns on flour-milling, go to make up the total profits which their official statements show. I am of the opinion that a careful investigation of the facts of the case will disclose that in proportion to the capital invested, the milling industry gives a more moderate return than do many other enterprises in Canada."

## APPENDIX No. 21.

MEMORANDUM FOR DIRECTOR DOMINION EXPERIMENTAL FARMS  
CONCERNING COST OF PRODUCTION OF CANADIAN  
FIELD CROPS, JANUARY 30, 1914.

Until recent years few data on the cost of production of field crops have been gathered at the Branch Experimental Farms and Stations. The information presented below is chiefly from Central Experimental Farm work. All the costs given, except where otherwise indicated, are for products, housed or threshed, ready for hauling to market.

*Prince Edward Island.*

The 1913 results from our Charlottetown Station not yet being available, only one year's results on the cost of producing oats, wheat, barley, clover hay and timothy hay can be given.

*Cost of Production of Field Crops, Charlottetown, P.E.I., 1913.*

Crop.	Area.	Yield per Acre.				Cost to Produce.		
						Per Acre.	Per Ton.	Per Bush.
	Acres.	Tons.	Lb.	Bush.	Lb.	\$ cts.	\$ cts.	Cents.
Oats.....	·57			58	18	13 75		23·5
Wheat.....	1·00			30	52	11 19		36·2
Barley.....	1·00			46	08	15 18		32·9
Clover hay.....	1·00	2	400			13 78	6 26	
Timothy hay.....	1·00	1	1,660			11 87	6 49	

*Nova Scotia.*

At the Nappan Experimental Farm the cost of production of field crops was recorded in 1913 only. The following is a summary of the data obtained:

*Cost of Production of Field Crops, Nappan, 1913.*

Crop.	Yield per Acre.				Cost to Produce.		
					Per Acre.	Per Ton.	Per Bush.
	Tons.	Lb.	Bush.	Lb.	\$ cts.	\$ cts.	Cts.
Turnips.....	23	23	767	03	45 57	1 98	5·95
Mangels.....	19	685	644	45	49 51	2 56	7·68
Ensilage Corn.....	12	1,380			39 33	3 10	
Potatoes.....			376	00	49 36		13·13
Oats.....			59	24	17 25		28·9
Wheat.....			29	30	29 05		48·9
Barley.....			33	44	13 83		40·8

*New Brunswick.*

No data is available for this province from the Experimental Station, Fredericton, as preparatory work only has as yet been accomplished in this direction.

*Quebec.*

Owing to the very poor rough condition of the soil on which our rotation work at Cap Rouge is being conducted the cost of production data collected to date are not representative of costs under normal average conditions, and it is not therefore deemed advisable to include them in this memorandum.

*Ontario.**Ensilage Corn (Central Farm, Ottawa)---*

The table below gives the cost of producing ensilage corn in a rotation as follows: First year, ensilage corn; second year, grain; third year, clover hay; fourth year, timothy hay; fifth year, grain.

*Cost of Production of Ensilage Corn, Central Experimental Farm, Ottawa.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1900.....	8.50	20 235	25 09	1.25
1901.....	20.00	16 1,286	23 71	1.42
1902.....	29.75	14 1,983	26 30	1.76
1903.....	34.00	13 500	21 73	1.64
1904.....	9.63	14 978	21 17	1.47
1905.....	10.20	19 1,112	26 52	1.36
1906.....	9.96	14 1,823	23 83	1.59
1907.....	8.90	13 1,763	23 37	1.68
1908.....	9.15	14 1,468	24 56	1.68
1909.....	8.56	14 622	20 26	1.42
1910.....	10.20	14 1,337	19 14	1.30
1911.....	9.96	11 1,053	18 32	1.59
1912.....	1.00	16 1,370	24 68	1.48
1913.....	1.00	14 1,530	26 58	1.60

*Oats (Central Farm, Ottawa).*

The costs tabled below are for oats grown after corn in a five-year rotation namely:—

First year, corn.

Second year, oats.

Third year, clover hay.

Fourth year, timothy hay.

Fifth year, grain.

*Cost of Production of Oats, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Bush.
	Acres.	Bush. Lb	\$ cts.	Cents.
1900.....	12-00	60 11	13 31	15-6
1901.....	35-00	46 02	11 97	22-7
1902.....	55-00	55 17	11 26	22-3
1903.....	52-00	53 17	11 62	21-7
1904.....	10-20	63 26	13 44	21-0
1905.....	9-96	35 30	14 11	39-2
1906.....	8-90	59 17	18 48	31-0
1907.....	9-96	47 11	12 96	27-4
1908.....	8-90	35 19	11 84	34-8
1909.....	10-2	48 23	15 61	32-0
1910.....	9-96	51 32	14 83	28-3
1911.....	8-90	57 12	15 00	26-2
1912.....	1-00	55 15	17 73	32-0
1913.....	1-00	42 30	16 63	39-0

*Timothy hay (Central Farm, Ottawa).*

The figures below represent costs of producing timothy hay in a five-year rotation, namely:—

First year, corn.

Second year, grain. Seeded with clover and timothy.

Third year, clover hay.

Fourth year, timothy hay.

Fifth year, grain.

*Cost of Production of Timothy Hay, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1900.....	32-00	1 1,750	8 32	4 45
1901.....				
1902.....				
1903.....	66-00	2 689	9 21	3 93
1904.....	9-96	2 417	10 75	4 87
1905.....	8-90	3 1,039	12 81	3 06
1906.....	9-15	2 953	10 30	4 16
1907.....	9-63	2 1,369	9 43	3 51
1908.....	10-20	2 1,160	9 95	3 85
1909.....	9-96	1 1,213	9 37	5 83
1910.....	8-90	2 360	9 17	4 20
1911.....	8-85	2 1,033	12 31	4 89
1912.....	1-00	3 175	15 55	5 04
1913.....	1-00	2 650	13 96	6 00

*Clover hay (Central Farm, Ottawa).*

The clover hay reported in following table was produced in five-year rotation, namely:—

First year, corn.

Second year, grain. Seeded with clover and timothy.



Third year, clover hay.  
Fourth year, timothy hay.  
Fifth year, grain.

*Cost of Production of Clover Hay, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1900.....	7.00	2 1,714	8 90	3 12
1901.....	37.00	3 484	9 48	2 92
1902.....	63.00	2 1,347	10 29	3 72
1903.....				
1904.....	8.90	4 706	13 17	3 02
1905.....	9.15	3 1,719	13 44	3 48
1906.....	9.63	2 1,193	10 85	4 17
1907.....	10.20	3 1,110	11 01	3 09
1908.....	9.96	3 106	10 47	3 43
1909.....	8.90	2 1,427	9 56	3 52
1910.....	8.89	3 774	10 46	3 08
1911.....	8.56	3 1,570	11 21	2 96
1912.....	1.00	4 1,950	17 59	3 54
1913.....	1.00	2 640	13 97	6 02

*Oat hay (Central Farm, Ottawa).*

*Cost of Production of Oat Hay, Central Farm, Ottawa.*

Year.	Area.	Yield per acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1904.....	2.00	2 766	15 41	6.46
1906.....	2.00	2 1,575	13.32	4.77

*Pumpkins (Central Farm, Ottawa).*

*Cost of Production of Pumpkins, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1900.....	0.50	18 250	16 30	0.90
1901.....	0.50	22 940	30 15	1 34
1902.....	0.50	14 1,100	30 06	2 06

Peas (Central Farm, Ottawa).

*Cost of Production of Peas, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Bush.
	Acres.	Bush.	Lb.	\$ cts.	cts.
1900.....	8.00	18	15	12 99	71.2
1901.....	5.00	19	00	12 82	67.5

Barley (Central Farm, Ottawa).

*Cost of Production of Barley, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Bush.
	Acres.	Bush.	Lb.	\$ cts.	Cts.
1900.....	5.00	40	04	13 04	32
1901.....	5.00	36	03	12 16	33.7
1904.....	9.15	63	27	13 44	21.1

Mangels (Central Farm, Ottawa).

*Cost of Production of Mangels, Central Farm, Ottawa.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Ton.	Cost per Bushel.
	Acres.	Tons.	Lb.	\$ cts.	\$ cts.	Cts.
1900.....	4½	31	1,555	30 52	0 96	2.9
1901.....	6	20	1,260	28 38	1 37	4.1
1902.....	6	26	156	32 15	1 23	3.6
1903.....						
1904.....	2	21	1,622	36 32	1 66	4.9
1905.....	2	27	543	49 51	1 81	5.4
1906.....	2	20	642	38 05	1 87	5.6
1907.....	2	18	1,225	45 45	2 33	7.0
1908.....	2	13	1,750	31 14	2 24	6.8
1909.....	2	26	200	34 63	1 32	3.9
1910.....	1	17	1,950	34 50	1 91	5.7
1911.....	1	14	160	27 72	1 96	5.9
1912.....	1	24	360	34 71	1 44	4.3
1913.....	1	18	.....	29 98	1 67	4.9

*Turnips* (Central Farm, Ottawa).*Cost of Production of Turnips, Ottawa.*

Year.	Area.	Yield per Acre.	COST TO PRODUCE.		
			Per Acre.	Per Ton.	Per Bushel.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.	Cts.
1900.....	4 00	17 1,500	28 63	1 63	4 83
1901.....	2 00	17 1,985	26 42	1 47	4 41
1902.....	2 00	18 340	27 42	1 51	4 50

*Corn for grain* (Southwestern Ontario).

The information here below given has been furnished by Mr. E. L. Shaw, Tilbury, Ontario, a successful corn grower who records carefully the cost of operating his farm. The cost of fertilizer, not included in his estimate, has been calculated at \$6 per acre.

*Cost of Production of Corn for Grain* (E. L. Shaw).

Year.	Rent and Manure.	Cultivation of land and seed.	Harvesting, husking and use of machinery	Total cost per Acre.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1906.....	8 25	6 65	4 25	19 15
1907.....	8 25	6 65	4 25	19 15
1908.....	8 50	6 95	4 75	20 20
1909.....	8 75	7 55	5 05	21 35
1910.....	8 75	8 00	4 65	21 40
1911.....	9 00	7 95	5 50	22 45
1912.....	9 50	9 00	5 75	24 25
1913.....	10 00	9 00	6 25	25 25

*Flax* (Brandon, Manitoba).

The flax reported upon was grown on rather dirty land, and yields are not as high as might be expected under fair average conditions. It was grown in the following rotation:—

First year, flax.

Second year, oats.

Third year, summer-fallow.

Fourth year, wheat. Seeded to rye, red clover and alsike.

Fifth year, hay.

Sixth year, pasture.

*Cost of production of Flax, Brandon, Manitoba.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Bushel.
	Acres.	Bush. Lbs.	\$ cts.	\$ cts.
1911.....	4 5	14 37	10 18	0 69
1912.....	4 5	8 50	10 64	1 20

*Wheat (Brandon, Manitoba).*

The rotation followed in producing the wheat, as reported below, was:—

First year, wheat.

Second year, wheat.

Third year, oats or barley.

Fourth year, summer fallow.

The cost of the summer-fallow is charged equally against the two following wheat crops:—

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Bushel.
	Acres.	Bush. Lb.	\$ cts.	Cts.
1911.....	7-00	27 51	12 34	44-3
1912.....	7-00	27 51	12 66	45-5
1913.....	7-00	22 51	11 49	50-3

*Clover hay (Brandon, Man.)*

This clover hay has been grown in a five-year rotation:—

First year, wheat.

Second year, wheat.

Third year, hoed crop.

Fourth year, barley. Seeded down with 8 pounds red clover, 3 pounds timothy and 5 pounds western rye grass per acre.

Fifth year, clover hay.

*Cost of Production of Clover Hay, Brandon, Man.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1912.....	8-00	.. 1,521	6 68	8 78
1913.....	8-00	1 1,058	10 57	6 91

*Corn (Brandon, Man.).*

Corn was grown in following rotation:—

First year, wheat.

Second year, wheat.

Third year, corn.

Fourth year, barley.

Fifth year, clover hay.

*Cost of Production of Corn, Brandon, Man.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Ton.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.
1911.....	8-00	12 .....	19 67	1 64
1912.....	8-00	6 1,750	25 31	3 68
1913.....	8-50	7 1,058	21 68	2 89

*Oats (Brandon, Man.).*

Oats were grown in following rotation:—

First year, wheat.

Second year, wheat.

Third year, oats.

Fourth year, summer-fallow.

*Cost of Production of Oats, Brandon, Man.*

Year.	Area.	Yield per acre.		Cost. per Acre.	Cost per Bushel.
	Acres.	Bush.	Lb.	\$ cts.	Cts.
1911.....	3.5	37	24	8 84	23
1912.....	3.5	59	14	9 87	17
1913.....	3.5	38	30	8 37	21.6

*Barley (Brandon, Man.).*

The costs are for barley grown in following rotation:—

First year, wheat.

Second year, wheat.

Third year, hoed crop.

Fourth year, barley; seeded down.

Fifth year, clover hay.

*Cost of production of Barley, Brandon, Man.*

Year.	Area.	Yield		Cost per Acre.	Cost per Bushel.
	Acres.	Bush.	Lb.	\$ cts.	Cts.
1911.....	8.0	49	36	7 82	16
1912.....	8.0	55	12	10.61	19
1913.....	8.5	55	14	11 56	21

*Wheat (Indian Head, Sask.).*

The cost of producing wheat as given below refers to wheat grown in a three-year rotation:—

First year, summer-fallow.

Second year, wheat.

Third year, wheat.

The total yield of the two wheat crops is taken, but the charges include costs of operating the full three years of the rotation. This is only fair, as the summer-fallow should justly be charged against the two crops of wheat following.

*Cost of Production of Wheat, Indian Head, Sask.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Bushel.
	Acres.	Bush.		\$ cts.	Cts.
1911.....	1.00	29	5	13 22	44.8
1912.....	1.00	20.7		12 19	58.9
1913.....	1.00	32.5		13 52	41.6



*Oats (Indian Head, Sask.)*

The oats reported upon herewith have been grown on the seventh year of a nine-year rotation, as follows:—

First year, summer-fallow.

Second year, hoed crop.

Third year, wheat.

Fourth year, oats.

Fifth year, summer-fallow.

Sixth year, wheat.

Seventh year, oats, seeded down with rye grass, red clover and alfalfa.

Eighth year, hay.

Ninth year, pasture.

*Cost of Production of Oats, Indian Head, Sask.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Bushel.
	Acres.	Bush.	Lb.	\$ cts.	Cts.
1911.....	5.52	51	26	14 69	28
1912.....	5.52	44	19	11 60	26
1913.....	5.52	39	09	11 87	30

*Hay (Indian Head, Sask.).*

The costs below are for hay in the eighth year of the following rotation:—

First year, summer-fallow.

Second year, hoed crop.

Third year, wheat.

Fourth year, oats.

Fifth year, summer-fallow.

Sixth year, wheat.

Seventh year, oats. Seeded down to western rye grass, red clover and alfalfa.

Eighth year, hay.

Ninth year, pasture.

*Cost of Production of Hay, Indian Head, Sask.*

Year.	Area.	Yield per Acre.		Cost per Acre.	Cost per Ton.
	Acres.	Tons.	Lb.	\$ cts.	\$ cts.
1911.....	5.52	..	1,493	4 57	6 12
1912.....	5.52	..	877	5 81	13 25
1913.....	5.52	1	514	7 14	5 68

*Wheat, Oats and Flax (Statistics Branch, Department of Agriculture, Sask.).*

The following figures have been supplied by the Saskatchewan Department of Agriculture. In regard thereto the Secretary, Statistics Branch, makes the following explanation:—

“We have collected from our crop correspondents estimates of the cost of producing wheat, oats and flax. As, however, this was our first effort to collect information of this nature, and as many of the returns could not be regarded as reliable, being somewhat arbitrarily made, it was decided not to make public the tables compiled therefrom. If, however, the enclosed, which is the average of over a thousand returns from different parts of this province, are of any value to you, you are at liberty to make use of them.”

## COST OF PRODUCTION OF WHEAT IN SASKATCHEWAN.

1911 Crop.

Crop District.	Preparation of ground.	Seed.	Planting or seeding.	Cultivation.	Harvesting.	Threshing.	Wear and tear on implements.	Other items of cost.	Total cost per acre.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1. S. Eastern.....	2 95	1 38	0-51	0 56	1 04	1 96	0 45	0 49	9 35
2. S. Central.....	4 56	1 41	0 54	0 53	1 14	2 60	0 53	0 54	11 90
3. S. Western.....	4 17	1 18	0 54	0 54	1 14	2 15	0 47	0 49	10 68
4. E. Central.....	2 93	1 44	0 51	0 49	1 25	1 99	0 53	0 47	9 61
5. Central.....	3 56	1 34	0 53	0 57	1 04	2 39	0 49	0 50	10 41
6. W. Central.....	4 61	1 35	0 53	0 52	1 05	2 44	0 46	0 46	11 42
7. N. Eastern.....	2 35	1 50	0 40	0 34	1 02	1 78	0 42	0 32	8 13
8. N. Central.....	2 42	1 38	0 47	0 52	1 24	2 36	0 45	0 53	9 37
9. N. Western.....	3 78	1 32	0 48	0 63	1 13	1 94	0 54	0 42	10 24
Province.....	3 48	1 37	0 50	0 53	1 12	2 18	0 48	0 47	10 13

Note: This does not include any charge for interest on investment—\$20 at 8%.....\$ 1 60  
 Costs have been increasing during past two years (labour, provisions, etc.)  
 \$10 at 6%.....0 60

\$ 2 20

## THE COST OF PRODUCTION OF OATS IN SASKATCHEWAN.

1912 Crop.

District.	Preparation of ground for seed.	Seed.	Planting.	Cultiva- tion.	Harvest- ing.	Thresh- ing.	Cost of haulage to elevator.	Interest on money invested.	Wear and tear on implements.	Other items of cost.	Total.
	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.
1. S. E.	2 56	0 87	0 48	0 35	1 05	3 15	1 40	2 00	0 43	0 31	12 60
2. S. C.	3 66	0 87	0 51	0 43	1 10	4 00	2 66	2 84	0 50	0 34	16 91
3. S. W.	3 50	0 90	0 51	0 43	1 14	3 65	2 88	1 95	0 58	0 34	15 88
4. E. C.	2 62	1 03	0 48	0 49	1 06	2 84	1 61	1 76	0 45	0 36	12 70
5. C.	2 10	0 90	0 54	0 43	1 03	3 51	1 67	2 15	0 44	0 53	13 30
6. W. C.	3 80	0 90	0 51	0 60	1 10	4 05	2 97	1 96	0 46	0 30	16 65
7. N. E.	2 32	0 95	0 50	0 45	1 08	3 51	2 29	2 15	0 34	0 35	13 94
8. N. C.	2 59	0 97	0 47	0 61	1 20	3 80	1 98	1 51	0 43	0 33	13 89
9. N. W.	3 29	0 99	0 57	0 55	1 23	3 43	2 09	1 58	0 51	0 27	14 51
Province.	2 94	0 93	0 50	0 48	1 11	3 54	2 17	1 98	0 46	0 34	14 48

## THE COST OF PRODUCTION OF FLAX IN SASKATCHEWAN.

1912 Crop.

1. S. E.	2 68	1 08	0 46	0 40	0 82	2 88	0 74	1 83	0 36	0 25	11 50
2. S. C.	3 82	1 02	0 54	0 40	0 84	3 08	1 69	3 28	0 47	0 42	15 56
3. S. W.	3 64	0 90	0 53	0 50	0 88	2 89	1 81	3 43	0 44	0 32	13 23
4. E. C.	2 90	1 13	0 50	0 43	0 83	2 77	0 77	1 43	0 36	0 20	11 32
5. C.	2 86	1 22	0 61	0 77	0 89	3 35	0 86	2 22	0 42	0 41	13 61
6. W. C.	5 19	1 22	0 51	0 62	0 78	3 85	1 20	1 89	0 34	0 33	15 93
7. N. E.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
8. N. C.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
9. N. W.	3 47	1 01	0 48	0 37	0 88	2 94	1 35	1 41	0 47	0 30	12 68
Province.	3 50	1 08	0 51	0 49	0 84	3 10	1 13	1 98	0 40	0 31	13 40

Small quantity grown in this district; accurate figures not obtainable.  
 Small quantity grown in this district; accurate figures not obtainable.

*Fall Wheat (Lethbridge, Alberta).*

The reference in this case is to wheat grown in a two-year rotation, namely:—

First year, summer-fallow.

Second year, fall wheat.

The cost of the summer-fallow is charged against the crop of wheat.

*Cost of Production of Fall Wheat, Lethbridge, Alberta.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Bush.
	Acres.	Bush. Lb.	\$ cts.	Cents.
1911.....	1.57	35 15	14 30	40.5
1912.....	1.57	26 58	15 89	59.0
1913.....	1.57	22 30	12 00	53.3

*Oats (Lethbridge, Alberta).*

These oats followed peas and oats for hay, which latter in turn had been preceded by summer-fallow.

*Cost of Production of Oats, Lethbridge, Alberta.*

Year.	Area.	Yield per Acre.	Cost per Acre.	Cost per Bush.
	Acres.	Bush. Lb.	\$ cts.	Cents.
1912.....	1.25	50 15	10 35	20.5
1913.....	1.25	37 32	10 08	26.6

*Sheaf Oats (Lacombe, Alberta).**Cost of Production of Sheaf Oats, Lacombe, Alberta.*

Year.	Area.	Yield per Acre.	COST TO PRODUCE.		
			Per Acre.	Per Ton.	Per Bush.
	Acres.	Tons. Lb.	\$ cts.	\$ cts.	Cents.
1911.....	3.909	4 670	14 74	3 43	.....

*Barley* (Lacombe, Alberta).

*Cost of Production of Barley, Lacombe, Alberta.*

Year.	Area.	Yield per Acre.	COST TO PRODUCE.		
			Per Acre.	Per Ton.	Per Bush.
	Acres.	Bush. Lb.	\$ cts.	\$ cts.	Cents.
1911.....	3·909	27 43	9 72	.....	34·8
1912.....	3·909	24 40	9 40	.....	37·8
1913.....	3·909	28 06	10 44	.....	37·1

*Spring Wheat* (Lacombe, Alberta).

*Cost of Production of Spring Wheat, Lacombe, Alberta.*

1911.....	3·909	18 20	11 74	64·0
1912.....	3·909	38 02	10 99	28·8
1913.....	3·909	30 27	10 17	33·4

*Oats* (Lacombe, Alberta).

*Cost of Production of Oats, Lacombe, Alberta.*

1911.....	3·909	38 10	10 23	26·7

*British Columbia.*

No reliable data on the cost of production of field crops for this province are available.

(Signed) O. C. WHITE,  
Asst. Dominion Field Husbandman.



## APPENDIX No. 22.

JOURNAL OF THE BOARD OF AGRICULTURE, MARCH, 1912.  
COST OF PRODUCTION IN AGRICULTURE.

One of the objects to which the grant for agricultural research, recently placed at the disposal of the Board of Agriculture and Fisheries, will be devoted is the maintenance of an Institute for the study of Economics of Agriculture, a subject of which little has been heard in Great Britain hitherto. A marked feature of the progress in recent years in the technique of business management has been the prominence given to what are technically known as "costs." The majority of large manufacturing concerns have nowadays a cost department, one of whose functions it is to ascertain and record the cost of each operation that is required to convert the raw material into the finished article ready for the market. Thus, if the manufactured product is worth a sovereign, the costs department ascertains to the fraction of a penny the value of the raw material used, the cost of labour at each successive stage of manufacture, and even such details as, say, the cost of the coal used in producing power for any necessary machinery, the fractional share of management charges properly debitable to the article in question, and so on, in as minute detail as may be considered desirable. It is thus possible to institute comparisons and so check waste, to drop unprofitable "lines" and develop profitable departments.

So far, work of this kind has not been done in relation to agriculture in Great Britain, but a beginning has been made in the United States by the Bureau of Statistics, and some interesting papers on the subject will be found among the publications of that department.

The need for accurate information on the cost of agricultural operations may be illustrated from the recent controversy in the daily press on the subject of the cost of growing sugar beet. No general agreement has been reached on this vital question—vital because on the answer to it, the useful employment of many thousand pounds of capital may depend—and estimates differing by 100 per cent from one another, have their advocates, each of whom produces an ostensibly convincing array of figures. A common feature of all these figures is that they are used on arbitrary assumptions as to the cost of such things as, for example, horse labour, a subject which gave rise to an animated and inconclusive discussion of experts at a meeting of the British Association two years ago. Another fruitful subject of conflicting views arises from the question: What is the cost of producing beef or mutton? Some experts say that the profit is nil, others that corn-growing does not pay, but stock-keeping does. The controversy arises because there is no foundation of hard statistical fact on which to build. No one has come forward, for example, to say that he has collated figures from one hundred typical farms, and that the prevailing cost of keeping a horse is so much, and that on the average it works so many hours per diem, two figures which, if obtained, would go far to settling the question. As a rule, farming does pay, but the question as to what description of farming pays best under defined conditions, and why, cannot be answered.

The method adopted by the United States Bureau of Statistics is to place qualified persons on the farms to keep or obtain records of the times spent on each description of agricultural work, the exact weight, and, as far as possible, cost of all materials produced or consumed on the farm. The particulars so obtained are carefully abstracted and tabulated, the precise information as to costs is obtained. The following are typical examples:

## AVERAGE ANNUAL COST per Acre of Farm Machinery in Minnesota.

	Dollars.
Binders...	0.181
Drills...	0.075
Ploughs...	0.335
Threshing outfit...	0.335

These figures are based on averages for a large number of figures for (1) original cost of machines; (2) number of years in use; (3) depreciation; (4) repairs; (5) acres operated on per year.

## AVERAGE ANNUAL COST of maintaining a Farm Horse in Minnesota.

	\$	cts.
Interest on investment...	5	54
Depreciation of horse...	5	56
Depreciation of harness...	2	10
Shoeing...	1	42
Food...	63	49
Labour...	11	88
Miscellaneous...		40
Total...	90	40

Average number of hours worked per day, 2½. Cost per working hour 0.0925.

It cannot be suggested that these figures are applicable to Great Britain. The point of interest is that they are based on the average of a large number of actual figures obtained over a series of years on many farms, and consequently represent fact, not opinion.

It is necessary, however, to point out that the issues appear to be simpler in the United States, in so far as agriculture there seems more specialized, and consequently less complex from a book-keeping point of view. A farmer who confines himself to producing wheat or cotton has a much simpler problem of costs to solve than one who takes up mixed farming in this country, and has to combine grain-growing with beef or mutton production, and, perhaps, horse breeding as well. Then, again, intensive farming and its necessary accompaniment, an approved rotation of crops, present a more difficult problem.

## APPENDIX No. 23.

## DAIRY PRODUCTION IN CANADA.

By J. A. RUDDICK, Dairy Commissioner.

It seems to fall to my lot as a Dominion official to present an annual review of the dairying industry for this and other conventions of dairymen held throughout the year. I suppose it is quite appropriate that I should do this and I do it all the more readily because I believe that it is important for every person connected with the industry to be well informed on the general trend of dairying in Canada, both in its international and domestic aspects. The milk producers of the whole Dominion should never lose sight of what is going on in other parts of the world, now that butter and cheese have become articles of international commerce. There is every reason also why the dairy farmers in Ontario should be just as much interested in the development of the creamery industry of Alberta, for instance, as they are in any movement which is taking place within the limits of their own province.

Until quite recently it was the practice to rely on the figures of the export trade as the index of progress and development, mainly, I suppose, because they were the only figures available. They were never a satisfactory basis even when the home consumption was fairly steady from year to year, for the reason that they failed to indicate in any respect the volume and extent of the whole industry, and now that home consumption is growing so rapidly, partly at the expense of the exports, information based on the export trade alone is decidedly misleading.

I expect to prove, before I finish, that the opinion expressed by many when the exports began to decline, and which still prevails in some quarters, namely, that the dairying industry has not made as much progress of late years as it did at one time is entirely erroneous. I also propose to show that the decrease in the number of cows in Eastern Canada is not an indication of any decrease in total production, because the number of cows is only one of the factors which has to do with the amount of milk produced. In order to get a correct perspective of the whole situation, it will be necessary for us to go back at least to the census of 1901. These somewhat ancient figures are of no particular value in themselves and, of course, we have a greater interest in the future than we have in the past, but it will be necessary to use them for the purpose of comparison in order to show the rate of progress, and thus get a line on what the future has in store for us.

## NUMBER OF COWS IN CANADA.

Let us turn for a moment, then, to consider the "cow population" of the Dominion, if I may use such an expression. In 1871 the number of milch cows in Ontario, Quebec, New Brunswick and Nova Scotia was 1,251,209. The Census of 1901 shows that the number for all Canada had practically doubled during the intervening years. The total number of milch cows in Canada, according to the census of 1911, was 2,594,179, distributed as follows:—

TABLE I.

*Milch Cows in Canada.*

	1901.	1911.
Ontario.....	1,065,763	1,032,979
Quebec.....	767,825	753,134
New Brunswick.....	111,084	108,532
Nova Scotia.....	138,817	129,302
P. E. Island.....	56,437	52,109
Manitoba.....	141,481	155,337
British Columbia.....	24,535	33,953
Saskatchewan.....	56,634	181,146
Alberta.....	46,101	147,687
Totals for Canada.....	2,408,677	2,594,179
Increase in 10 years.....	185,502	

This table shows a decrease in the number of cows in Eastern Canada and an increase in the western provinces with a net increase for the whole Dominion of 185,502. That is one aspect of the situation which is not as satisfactory as it might be, because all will agree that there is plenty of room for a much greater increase. The number of cows in most counties in Ontario could be doubled without exceeding the number per acre in the counties of Oxford, Middlesex and one or two others.

## TOTAL PRODUCTION.

Members of the association will recall the fact that at the last annual convention I estimated that the annual production of milk, butter and cheese in Canada then amounted to about \$120,000,000 in value. It was thought by some that my estimate was rather high. I am glad to be able to show you that it was after all quite a conservative estimate.

The following table gives the value of dairy products by provinces in 1910 as compared with 1900. The values as shown by the census are for the preceding year, but the number of cows given are for the year in which the census was taken.

TABLE II.

*Value of Dairy Products in 1910 as compared with 1900.*

	1900.	1910.	Increase.
	\$	\$	\$
Ontario.....	34,776,330	43,332,047	8,555,717
Quebec.....	20,207,826	31,663,220	11,455,394
New Brunswick.....	2,260,537	3,998,742	1,738,205
Nova Scotia.....	2,885,997	4,618,108	1,732,111
P. E. Island.....	1,111,614	1,607,672	496,058
Manitoba.....	2,792,606	6,077,982	3,285,376
British Columbia.....	1,159,993	2,620,495	1,460,502
Saskatchewan.....	729,574	7,566,007	6,836,433
Alberta.....	546,476	7,855,751	7,309,275
Totals for Canada.....	66,470,953	109,340,024	42,868,981

The increase in the number of cows during the decade was only 7 per cent, while the value of the total product, that is, milk used for direct consumption with what was used in the manufacture of cheese, butter, condensed milk, etc., shows an increase of 60 per cent. In Ontario with a decrease in the number of cows of 3 per cent, the value of the product increased by 18 per cent. In other words, in 1900 the value of the total product was \$27 per cow for the whole Dominion, while in 1910 it had risen to \$42 per cow. Part of this increase must be attributed to higher prices in the latter year and to the fact that a larger proportion of the total product was sold as market milk. But even after these allowances are made, the showing is a very satisfactory one. Cheese and butter prices in 1900 were less than 10 per cent below those of 1910.

## GROWTH OF DAIRY PRODUCTION.

Now let us take a look at the matter from the point of view of quantities, which is readily the fairest basis of comparison. I have had the total production worked out in terms of milk, that is to say, the butter, cheese, condensed milk, cream and ice cream have been converted into their milk equivalents with the following results.

TABLE III.

Comparative statistics of the dairying industry expressed in terms of milk, showing production, exports, imports, and total and per capita consumption in the census years 1901 and 1911.

	CENSUS.		Per Cent of Increase or Decrease.
	1901.	1911.	
Population of Canada.....	5,371,315 Lb.	7,204,838 Lb.	+34.13
Total production of milk.....	6,866,834,000	9,871,178,103	+43.75
Exports of dairy Products as milk.....	2,514,596,967	2,236,663,687	-11.05
Imports of dairy Products as milk.....	34,886,346	39,871,207	+14.28
Per capita consumption as milk.....	816.76	106,517	+30.41
Total consumption as milk.....	4,387,123,379	7,674,385,623	+74.92
Number Milch Cows in Canada.....	2,408,677	2,594,179	+ 7.70
Average pounds Milk per Cow.....	2,850	3,805	+33.50

NOTE.—As milk production was not included in the 1901 census the quantity shown in the 1901 column was arrived at as follows: The total value of all dairy products in 1900 was \$66,470,953 which included the manufactured value of cheese and butter made in factories, and the average gross value of the milk supplied to factories was 96.8 cents per hundred pounds. Taking this figure as a basis the above total value represents a total milk production of 6,866,834,000 pounds.

If we take butter alone, both creamery and home-made, we find much the same result. The percentage of increase in total production is exactly the same as for milk, but both total consumption and per capita consumption show a somewhat smaller gain.



TABLE IV.

Comparative statistics of the butter industry showing production, exports, imports, and total and per capita consumption in the census years 1901 and 1911.

	Census 1901.	Census 1911.	Per Cent of Increase or Decrease.
Population of Canada.....	5,371,315	7,204,838	+34.13
	Lbs.:	Lbs.	
Total production of butter.....	141,409,815	202,796,699	+43.41
Exports of butter.....	16,335,528	3,142,682	-80.76
Imports of butter.....	1,146,639	1,227,390	+ 7.04
Total consumption.....	126,220,926	200,881,407	+59.15
Per capita consumption.....	23.49	27.88	+18.68

## INCREASE OF PER CAPITA CONSUMPTION.

The increase in per capita consumption is a very striking fact in tables III and IV. It may be attributed partly to the great prosperity of the country, and consequent increase of purchasing power, and partly to the better quality of milk and its products in recent years. It took about \$17,000,000 worth of dairy products to supply the extra demand arising from the increased per capita consumption in 1910 as compared with 1900, and yet it was hardly thought of as an outlet of any importance. If we had succeeded by some special effort in expanding our foreign trade in dairy products to that extent during these 10 years, it would have been the talk of the country. Then there is the increase in consumption due to the growth in population, which amounted to about \$20,000,000 more during the same period. This shows that the total home consumption in 1910 exceeded that of 1900 by at least \$37,000,000. The decrease in the value of the exports for the same period was less than \$3,000,000.

It will be understood, of course, that if the comparison was based on the last 10 years (1903-1913) the figures in tables III and IV would be somewhat different. For instance, if the exports of 1913 were compared with 1903, in which year they reached the maximum, the decrease in that item would be larger, and both the total and per capita consumption would also be larger than what is given in the tables. Statistics for this period are not available, but those which are quoted will serve to show the trend of both production and consumption during the decade between 1900 and 1910 and from these figures we can estimate very closely the present status of the industry in this respect. If I may be allowed to make an estimate for 1913, I would say that the value of the total production was about \$121,000,000 and as the exports for the year will be approximately \$20,000,000 the home consumption must be around the \$100,000,000 mark.

The different products and the value of each in 1910 will also be of interest.

TABLE V.

Factory cheese.....	\$ 21,587,124
Home made cheese.....	153,036
Creamery butter.....	15,645,845
Home made butter.....	39,889,953
Condensed milk.....	1,813,971
Milk and cream consumed and used for ice cream.....	30,250,005
Total.....	<u>\$109,339,934</u>

I stated at the outset that I hoped to prove certain things. If these figures which I have given prove anything, it is that there has been a greater growth in the

dairy industry since the exports began to decline than during any other similar period in its history. Before I finish I will tell why, at the risk of undue repetition, I have dwelt at some length on that point again this year.

#### INCREASE IN YIELD PER COW.

Now let me draw special attention to what I consider is, in some respects, the most important fact set forth in the preceding tables. I refer to the increase in the annual yield of milk per cow from 2,850 pounds in 1900 to 3,805 pounds in 1910. Here is where we get our large increase in production with a comparatively small increase in the total number of cows, and it was lack of complete information on this point which caused many to believe that there was a retrograde movement in some of the provinces. It would have required 3,463,571 cows at the average production of 1900 to have produced the quantity of milk shown in the census for 1910—an increase of 1,054,894 instead of the actual increase of 185,502. This increase in yield represents at least \$25,000,000 a year for the number of cows milked in 1910, and it is safe to say that the sum would be larger if it were known for 1913.

#### RESULTS OF COW TESTING.

Mr. President, it would be absurd to claim that this great improvement in Canadian herds is all due to the cow testing campaign which has been carried on by the Dairy Division at Ottawa for the past nine years; but a very large part of it certainly is due either directly or indirectly to that movement. It is a source of gratification to myself and to my assistants, Mr. Barr, Mr. Whitley, Mr. Burgess and others, to feel that the time and energy which we have spent on this work is now, after some early discouragements, showing tangible results. It must also be satisfactory to the public at large to know that the few thousand dollars spent annually for this purpose is being returned to the farmers in millions. And the end is not yet. It will be easier, now that the movement has acquired such momentum, to make another 1,000 pound increase in the average yield. Just think for a moment what that will mean to the industry. The added profit, and the increase is nearly all clear profit, will give an impetus to the production of milk in this country such as it has never received from any other source.

We must not forget, however, that satisfactory as these big figures and large average increases are, the main thing for individuals to consider is whether they are sharing in this improvement. If the average cow is producing 1,000 pounds of milk more than she did ten years ago, it follows that many cows are yielding less and, of course, others are exceeding that of the average. Are you as individual farmers still lagging behind in these matters? If so, why? There must be some reason. Is there any good reason why you should not be getting as good results as others?

There is just one other fact set forth in the tables which I wish to call attention to, and that is the growth of the industry in Alberta and Saskatchewan. The combined value of dairy production in the two provinces was only \$1,276,050 in 1900, as against \$15,421,758 in 1910. If my information is correct, that rate of increase has been accelerated in the last three years, and it requires no prophetic vision to see this immense territory as an important factor in the Dominion total production in the near future if the present tendency is continued.

#### THE SEASON OF 1913.

Leaving this part of my subject, I pass on to refer briefly to the season of 1913. The year's operations do not present any very notable features. There has been a further decline in the export of cheese which will probably amount to nearly 200,000 boxes, or 16,000,000 pounds for the season. This is partly due to the dry weather which prevailed in Ontario and Quebec, and partly to the continued diversion of milk from the cheese factories to the creameries and condensories and to the increased shipment of milk and cream to our own cities as well as to the United States.

## THE EFFECT OF THE NEW U.S. TARIFF.

The removal of the United States duty on milk and cream, and the reduction of the duty on butter from 6 cents a pound to 2½ cents, and on cheese from 6 cents a pound to 20 per cent ad valorem, and the renewed activity in the shipment of milk and cream across the border is a familiar story to every dairyman in this part of the country. Just what the development of this trade may be in the future is rather hard to determine. Milk and cream will probably be exported as long as the present tariff remains in force, especially at convenient shipping points, but there does not seem to be any immediate prospect of a large quantity of either cheese or butter being exported. In the present condition of the Canadian market a very small movement in that direction would boost prices to a prohibitive point. The circumstances are such that New Zealand and Australian butter is more likely to supply the demand than Canadian. Having a large surplus for export, both these countries must accept for their surplus the international value, which is lower than the ruling price promises to be in Canada. Heavy shipments of butter have already been made from New Zealand to San Francisco since the new tariff came in force on October 3rd last.

The swarm of Yankee drovers which overran some parts of Ontario and Quebec when the duty on cattle entering the United States was removed, was not an unmixed evil from the standpoint of the dairy industry. They are welcome to the worn out and discredited cows which were picked up in rather large numbers. This is a better way for the progressive farmer to dispose of his unprofitable animals than to sell them to his own neighbours. The only regret we need have over this export of cattle from the dairy point of view is for the young, untried heifers which unprecedented prices induced some farmers to part with, thinking perhaps it was too good a chance to lose. There need be no fear of lost opportunity in this matter. The price of cattle on this continent must rule high for some years to come if the law of supply and demand is to hold good.

## IMPORTS OF NEW ZEALAND BUTTER.

Shipments of both cheese and butter from Eastern Canada to points west of the Great Lakes have been less than they were in 1912. It is said that there was an over supply of New Zealand butter at Vancouver last winter, some of which had to be carried into the season of 1913, but it is significant that while the demand for butter from the East has decreased, the direct shipments from New Zealand to Vancouver are expected to be 25 to 30 per cent larger than last year.

The last Australian steamer brought 17,500 boxes of New Zealand butter to Vancouver, a few of which were intended for Seattle. The total imports at Vancouver for the fiscal year ended March 31 last amounted to 6,018,022 pounds. The relatively greater demand for New Zealand butter may possibly be due to the fact that the freshly made New Zealand article can be laid down for less money than stored butter from the East, but there is no doubt that this butter from the Antipodes competes very strongly with Canadian in the matter of quality, and the facts as stated, should give our buttermakers some food for thought.

In conclusion, let me say that I have not taken the trouble to dig up all these figures simply for the sake of making an interesting statement. I desire rather to counteract the harm that has been done by the publication of superficial and erroneous views as to the lack of progress in the dairying industry of late years. Such statements tend to discourage rather than promote its growth. At the same time, I do not wish to give the impression that we should be satisfied with the results which I have outlined, and my chief object in placing these few facts and estimates before you is to stimulate a larger production of milk in this country. It seems absolutely clear to me that there has never been such a good outlook for dairying in Canada as there is at the present time. The markets are assured and prices are bound to be higher than they have been in the past.

(An Address delivered at the Dairymen's Convention at Cornwall, Ont., on January 8, 1914.)

## APPENDIX No. 24.

Reports prepared by W. A. Brown, B.S.A., of the Department of Agriculture on the "Canadian Egg Trade."

"The Development of Co-operative Poultry Work in the Province of Prince Edward Island;" and on "The Relation of the Preservation of Eggs by Cold Storage to the Development of the poultry Industry in the United States and Canada."

## CANADIAN EGG TRADE.

The Live Stock Branch of the Dominion Department of Agriculture has been engaged for some months in an investigation of the Canadian egg trade.

At this time when the subject of eggs is being discussed so freely by the press and public generally it may be of interest to cite some of the conclusions reached as a result of this investigation to date.

## THE CONSUMPTION OF EGGS IN CANADA.

Canadians are large consumers of eggs, and the consumption per capita of eggs in Canada is steadily increasing. The following table will give some idea of the rate at which consumption is expanding.

TABLE I.

*Relation of Consumption to Production in the Canadian Egg Trade.*

	Census of 1891.	Census of 1901.	Census of 1911.
Population of Canada .....	4,833,239	5,371,315	7,204,838
Poultry population of Canada.....	12,696,701	16,562,084	29,548,723
Total egg production. ....	64,499,241 dz.	84,134,802 dz.	123,002,132dz.
Exports of eggs.....	8,002,935 "	11,363,064 "	92,164 "
Imports of eggs.....	602,533 "	951,745 "	2,378,640 "
Total consumption.....	57,078,839 "	73,723,483 "	125,288,608 "
Average consumption per capita.....	11.8 "	13.72 "	17.39 "

It may be noted that the increased consumption per capita between the years 1901 and 1911 amounts to nearly four dozen. This increase is not by any means confined to the cities. Farmers generally are eating more eggs than ever before. In many rural districts it is practically impossible to secure fresh meat at certain seasons of the year. At such times eggs are usually plentiful and are used freely.

In the cities with the steadily increasing price of meat, even though eggs may be high in proportion, the fact that eggs are such a wholesome and nourishing food, that they can be served in such a variety of ways and prepared with such little labour, keeps them in constant and ever-increasing demand.

## CANADA IMPORTS EGGS.

Canada, an agricultural country, is obliged to import eggs for home consumption. Canada once exported eggs. Ten years ago between ten and twelve million dozen were exported to England, and previous to 1900 even greater quantities were shipped annually to the United States. The following table gives the exports and imports of eggs since 1900:—



TABLE 2.

Year.	Exports.	Imports.
	Doz.	Doz.
1900.....	10,187,906	709,829
1901.....	11,863,064	951,745
1902.....	11,635,064	772,572
1903.....	7,404,100	559,236
1904.....	5,780,316	972,242
1905.....	3,601,427	306,567
1906.....	2,921,725	462,669
1907.....	2,591,205	661,104
1908.....	1,365,890	1,149,986
1909.....	552,850	1,136,120
1910.....	160,650	884,073
1911.....	92,164	2,378,640
1912.....	203,231	7,577,826
1913.....	126,854	13,240,111

A few eggs are still exported, and even at times when the export was greatest a considerable quantity was imported. This is accounted for by the nature of the country. The Maritime Provinces still export a few eggs, while British Columbia has always been an importing province.

It is of interest to note that the imports have practically doubled each year during the past four years. The following table shows the imports by provinces during the fiscal year ending March 31, 1913:—

TABLE 3.

IMPORTS of Eggs into Canada from the United States during the fiscal year ending March 31, 1913, by provinces.

	Doz.
British Columbia.....	5,529,414
Manitoba.....	2,064,326
Alberta.....	1,954,110
Ontario.....	1,724,629
Quebec.....	812,201
Saskatchewan.....	414,340
Yukon.....	138,779
Nova Scotia.....	1,996
New Brunswick.....	316
Prince Edward Island.....	0
Total.....	13,240,111

## REASONS FOR THE PRESENT SHORTAGE.

From the time that mixed farming became general in the Central States the United States' eggs crop has been able to keep pace with the demand, and heretofore when there was a shortage in Canada eggs have been available on the Chicago and other western markets. This winter, however, increased consumption on the part of the Americans themselves, and through a slightly smaller egg crop this year, the usual surplus is not available. In recent years the Canadian storage crop was sufficient to meet the demand until the middle of December or a little later. After that American eggs were imported to supply the shortage.

In actual receipts possibly the United States' crop was not much smaller than previous years, but, owing to the extremely mild weather, winter production was phenomenally large with a corresponding falling off in spring production. This meant a short crop for storage, as storage eggs are what largely supply the demand during the winter months. This accounts for the fact that the price of eggs is higher in



the United States, and that there is little or no surplus for export to Canada. In fact, since the revision of the tariff, the United States is actually importing, over 8,000 cases of foreign eggs having been received in New York alone during the week ending November 29. It is expected that the availability of foreign eggs for both the United States and Canada will have the effect of averting a serious shortage and of reducing materially the price to the consumer.

#### THE QUALITY OF CANADIAN EGGS AS MARKETED.

Another point, and one that should not be overlooked before dwelling upon the great opportunity that exists for the Canadian producer at the present time, is the fact that Canadian eggs as marketed at the period of high production are far from being of the high quality that one would expect.

From information in the possession of the Live Stock Branch, it is estimated that in the summer time not over 33 per cent of the eggs received in the large markets grade "select." About 40 per cent grade "stale," approximately 17 per cent "very stale," 5 per cent "dirty" and "broken," and 5 per cent "bad." Some dealers state that as high as 10 to 12 per cent of their receipts prove, upon examination, to be wholly unfit for food. This latter is a feature that those who criticise the present high prices do not seem to have taken into consideration.

In conclusion it is evident that the most salient feature of the whole question is the golden opportunity for the farmers and others to increase their poultry plants and take advantage of the high prices prevailing for poultry and poultry products.

Every farmer should keep at least one hundred hens. The amount of labour entailed is not great, and with reasonable success the revenue obtainable therefrom, in proportion to capital invested, is greater and more readily available than from any other branch of farm work.

(Extract from an address delivered by W. A. Brown, B.S.A., at the Ontario Provincial Winter Fair, Guelph, December 8, 1913.)

#### *Press Notice.*

An important part of the poultry work of the Live Stock Branch of the Department of Agriculture during the past year has been the organization of Co-operative Egg Circles. Ten circles in all have been organized under the auspices of the branch, working in conjunction with the Provincial Agricultural College authorities and the Poultry Producers Association of Canada. The preliminary work in connection with a number of others has been done, and from present indications it is apparent that this phase of co-operative work is likely to have a rapid growth in the near future.

Being primarily concerned with the improvement of the Canadian egg trade, the Live Stock Branch has encouraged the formation of these circles because the movement affords a means whereby the quality of eggs can be improved as they leave the farm, and the pernicious practice of holding eggs both on the farm and in the country store largely eliminated. Co-operative effort of this kind also affords a medium whereby the eggs in any given community may be collected and marketed frequently and regularly, and insures to the consumer a new-laid egg of uniform quality at no great increase in cost.

At the time of joining the association the members agree to stamp each egg with a given number designated by the board of directors. This is done so that the eggs of each member may be identified when graded and payment made according to quality.

A manager is appointed by the board of directors whose business it is to collect, grade, sell the eggs and apportion the returns among the members according to the quantity and quality received. In most circles the eggs from each farm are collected

at stated intervals, but in others the members deliver the eggs to some central point such as a creamery, cheese factory, store or house, from which the manager makes the shipment.

It is well known that at certain seasons of the year there is a wide difference between the price received for eggs by the farmer in the country store and the price paid by the consumer in the city. This difference is not nearly so marked in the spring of the year as it is in the late summer, fall and winter. In other words, as the quality of ordinary farm eggs becomes more uncertain the premium placed on new-laid circle eggs increases. While during the spring of the year prices received by circle members may not greatly exceed those paid in the local store, it is a fact that for the eggs produced in the month of December last year the majority of circles in the provinces of Ontario and Quebec received a price of from 45 to 50 cents a dozen.

A limited number of circles will, no doubt, be able to take advantage of the rapidly growing select trade in the larger Canadian cities, but from the fact that the wholesale egg dealers in Ontario and Quebec have recently adopted a new system of buying on a basis of quality, it is likely that the product of the majority of circles will find its way to the consumer through the more recently established channels of trade.

The live stock branch stands ready and willing to help on the Egg Circle movement in every possible way. Officers of this branch are now in the field, and there is available a quantity of literature, including outlines of constitutions, by-laws, etc., dealing with the work, copies of which may be obtained upon request from the Live Stock Commissioner, Ottawa.

#### DEPARTMENT OF AGRICULTURE,

#### LIVE STOCK BRANCH,

OTTAWA, March 7, 1914.

#### THE DEVELOPMENT OF CO-OPERATIVE POULTRY WORK IN THE PROVINCE OF PRINCE EDWARD ISLAND.

The attention of the Live Stock Branch was first drawn to the possibilities of co-operative poultry work in the province of Prince Edward Island in the summer of 1912, when at the request of the Provincial Department of Agriculture the writer addressed a series of special poultry meetings in different parts of the island.

Not only were the people found to be particularly interested in the poultry industry, but also it was apparent that in some sections at least they were especially well informed as to the advantages accruing from co-operative marketing. Statistical information furnished by the Provincial Department of Agriculture also indicated that the exports of poultry products had assumed a foremost place among the various agricultural products exported. More careful investigation brought to light the fact, however, that while average farm flock was large and prices obtainable for dressed poultry fairly high, the export trade in eggs was largely in the hands of a few firms, and that the average yearly price obtained for eggs was low. Early spring and summer prices compared favourably with those in Ontario, but little encouragement had evidently been offered by wholesale firms towards the production of winter eggs. Undoubtedly the difficulties of winter navigation and the uncertainty of transportation at that time had had its effect as well. At any rate the prices prevailing in the winter season were largely governed by the supply and demand for eggs on the Charlottetown and Summerside markets.

From the fact that the greatest returns accruing from co-operative marketing of eggs are mostly apparent in the winter months, it seemed in light of the circumstances prevailing on the Island that it offered a particularly good opportunity for a thorough trial of co-operative marketing of poultry products in Canada, especially in

light of the great interest already taken in poultry keeping by farmers generally. Then again the partial isolation of the island and the spirit of loyalty that exists in that province tended to make the introduction of the movement comparatively easy.

Steps were therefore immediately taken by the Live Stock Branch to secure a competent representative for the Branch in that province. Such a man was secured in the person of Mr. T. A. Benson at that time assistant district representative in Ontario county. Mr. Benson was specially well fitted for this work, having not only a good general knowledge of poultry conditions, but having taken an active part in the development of co-operative work in Ontario county.

He commenced his work about the first of October, 1912, and during the late fall and early winter months thoroughly toured the province in the interest of the poultry industry. A number of egg circles were organized, but, owing to the scarcity of eggs and the relatively high prices prevailing in the early spring, the first shipment was not made until the month of May.

In all ten circles were organized and commenced shipping at intervals as organized throughout the summer and fall. The following table will give some idea of the financial benefits derived from the operations of the circles during the last seven months of last year.

THE AVERAGE ANNUAL EGG PRODUCTION PER HEN ON SPECIALIZED POULTRY PLANTS AS  
COMPARED WITH THAT OF THE AVERAGE FARM FLOCK.

Unfortunately the census enumerators in taking the various census have made no attempt to differentiate between the number of hens and the number of chickens on farms. The two have been included in the one estimate, and it has been impossible therefore to estimate the average production per fowl from this source.

Special investigation made by officers of the Poultry Division of the Live Stock Branch would indicate that on farms where the proprietors are making a specialty of poultry, the average annual egg production per hen ranges from 125 to 150. The average on one man's plant was 137.

On two general farms where reasonably accurate records had been kept the production was 93 and 96 eggs per hen respectively. From this and other information at hand it is safe to say that the production per hen on the average farm is less than 100 eggs per year, and that with reasonable care and attention this could easily be increased by at least two dozen per year. Another important point is the fact that very few farm flocks lay in the winter months, and that further it is apparent from results obtained elsewhere it would require no great outlay of time, capital and labour to secure a considerable portion of this increase in the winter months.





and it is evident that the movement has just commenced. Since the first of the year twelve additional circles have been formed and application received for the organization of over fifty more. It is estimated that sixty-five circles properly located will cover the whole island, and it would appear as if with reasonable encouragement it would be possible to arrange within a comparatively short time for the co-operative marketing of a large part of the total poultry and eggs produced in the province of Prince Edward Island.

From present indications it is altogether likely that at an early date a central association, known as the Federated Association of Prince Edward Island Egg Circles, will be formed. The Provincial Government is considering possible legislation to incorporate the various local associations, and it appears as if ways and means will be devised whereby it will be possible for co-operative associations to definitely enter into business undertakings in something of the same manner as that followed by the Danish Co-operative Egg Exchange.

#### THE RELATION OF THE PRESERVATION OF EGGS BY COLD STORAGE TO THE DEVELOPMENT OF THE POULTRY INDUSTRY IN UNITED STATES AND CANADA.

Probably no single influence has been more directly accountable for the remarkable development of the poultry industry in the United States and Canada during the past ten years than the preservation of eggs by cold storage.

There is a constant and fairly uniform demand for eggs throughout the entire year. The rate of production, however, is far from constant. The preservation of eggs by cold storage has made possible, however, a uniform supply at all seasons of the year, and it is largely due to this fact that the consumption of eggs at the present time is so much greater than it was some years ago.

Even with the comparatively small production previous to the advent of cold storage, there was a considerable portion of the annual egg crop wasted. The evidence of carelessness on the part of the producing public at that time is still apparent in the antiquated methods that prevail in the handling of eggs at many country points.

Cold storage has been a great leveller of prices, not only to the producer but also to the consumer. Heretofore eggs produced in the season of high production were worth not more than one-half to one-third per dozen what they are to-day, and during the season of scarcity eggs at any price were simply not available. To-day, as the result of preservation of eggs in storage, the price through the greater part of the season of high production has increased considerably but not out of proportion to the increase of prices of other food products. On the other hand, it is estimated that in the months of October to January inclusive, the season of low production, from 70 to 80 per cent of the eggs consumed by the general public are eggs that have been preserved by cold storage.

While the variation between the average price of the eggs in the season of high production, at the present time, and the price paid for strictly new-laid eggs in the season of low production is probably greater than ever before, the price paid by the consumer for cold storage eggs in the season of low production is not greatly in advance of the prices that the same consumer has to pay for fresh gathered eggs at the time of high production.

The following figures are given as approximately average prices for the last five years and will serve to bear out the above contention. Approximate average prices paid by wholesalers during last five years for the months of April and June inclusive: 18 to 22 cents. Approximate selling price of same eggs held in cold storage November to January inclusive, 25 to 33 cents.

Approximate average price by consumers same time, April to June inclusive, 25 to 30 cents; November to January inclusive, 35 to 40 cents.



Eggs are ordinarily held in cold storage about six months. However, owing to the great variation in quality of eggs received by the wholesale dealers, according to the season of the year, it is difficult and even impracticable to attempt to strike an average.

Eggs produced in the months of March and April approximate the ideal which dealers would like to have for storage purposes. The weather is cool, eggs are plentiful, and the farm poultry houses have not become so unsanitary and contaminated with vermin as they are later and with a declining market, farmers, merchants, buyers and all concerned, tend to rush the eggs forward with the greatest possible despatch. The result is, that the eggs received first are placed in storage first and come out last, and owing to their higher quality, actually come out in better condition than those stored in the latter part of May and June. These eggs are taken out of storage from October to January inclusive. The eggs that went in in June, come out in October, a period of four months, and those that went in in March, may not come out till January, a period of nine or nine and a half months, and as stated above, invariably prove of better quality, providing storage conditions are good, than those that went in when the weather conditions were less favourable.

Eggs are one of the most difficult of food products to hold satisfactorily in cold storage. Cold storage operators have undoubtedly lost more money through the depreciation of eggs in badly managed, poorly regulated cold storage warehouses than they have with any other single food product. The chief difficulties encountered have been through the eggs becoming musty and spotted. Successful operators have learned that they must have specially constructed rooms for holding eggs and further, that precautions must be taken to prevent the air that has circulated through rooms containing fish, citrus fruits, and other strong smelling food products from entering the rooms in which the eggs are stored. A uniform temperature of approximately 29 degrees F., relative humidity of approximately 72, clean fillers, new cases, and rooms that are as clean and sanitary as possible, are the essentials in the proper storage of eggs.

The albumen of an egg forms a most excellent culture medium for the growth of mould spores and bacteria, and having in mind the great porosity of the egg shell on the one hand and the extremely unsanitary conditions to which eggs are so frequently exposed on the other, it is not to be wondered at, that even after the most careful candling, a large part of the eggs in storage prove upon examination at the end of the storage period to be unfit for food, if the temperature and humidity have been allowed to run high and variable. Many operators even after taking the best possible precautions in so far as methods of operation are concerned, place pans holding calcium chloride in the egg rooms in order to keep down the humidity.

Unfortunately, either as a result of faulty construction or from other causes, quite a number of the cold storages in Canada are not at all well suited to the preservation of eggs.

## APPENDIX No. 25.

MEMORANDUM by Charles W. Peterson, Esq., in regard to the bearing of Australian mutton on the cost of living in Canada.

THOBURN, B.C., March 23, 1914.

The Secretary,  
Board of Inquiry into Cost of Living,  
Regal Building,  
Ottawa, Ont.

SIR,—With reference to your letter of the 8th of January last asking me to submit a memorandum in regard to the bearing of the importation of Australian mutton upon the cost of living in Canada, I may say that I have given the matter considerable thought and do not think that I can do better than to submit to you a copy of a memo, dated the 30th January last addressed to Mr. Arkell of the Live Stock Commissioner's Branch dealing with the general subject of Australian mutton in the Canadian market.

As regards the effect of these importations on the cost of living in Canada, there can, of course, be only one conclusion, namely, that it *should* reduce the price of mutton to the consumer. Generally speaking, however, I received rather more for my mutton fifteen years ago on the hoof than we do to-day, and I pay twice as much for it retail as I did then.

The inference naturally is that the packer takes a larger profit now than then. This, however, may not and probably does not account for more than a fraction of the difference. My observations lead me to believe that the trouble largely lies in the retail end. The retailer to-day, all over Canada, is certainly doing business on a much larger gross profit basis than he did some years ago. Probably from one to two hundred per cent higher. In the first place, he naturally desires and requires a larger net profit. Secondly, his expenses are enormously higher such as complicated delivery systems, higher rent, higher wages, etc., etc. He is merely a link in the endless chain. My theory is that the price of no single commodity entering into the daily consumption or use of society can be advanced without in turn, sooner or later, causing the readjustment of all other values, unless some economic development takes place that upsets the regular routine. This happened in the case of mutton when the improved freezing facilities and transportation became available which enabled packers in Australia to land frozen mutton in America at a low price, which now controls the situation as far as the wholesale market is concerned. The retail trade, being governed by the conditions above set forth, is merely handling this and other mutton on its usual basis. Hence the increased retail prices.

Our concern is interested in getting the highest possible wholesale price for our mutton. Granting that the cost of retail handling is more or less fixed, which I believe it is, the only way in which the Canadian consumer could get cheaper mutton would be through some action which would still further reduce the wholesale price of this commodity, which, in turn, would drive us out of business. We made a large loss on our operations last year, which would seem to indicate that we have reached our limit as far as prices is concerned. In other words, if the consumer must have cheaper mutton, the industry in Canada will have to be eliminated entirely and more Australian mutton substituted to take the place of what is now produced in Canada, or, at least, in Western Canada. In Eastern Canada, of course, the breeder gets the

benefit of the long rail haul, at least until the opening of the Panama canal when whole cargoes of frozen mutton will doubtless be landed in the original bottoms at Atlantic ports and at a very slight cost per hundred over the rate to Pacific ports. We will then be able to enlist the sympathy of our eastern friends in our line of business.

I regret I cannot add anything of special value to the discussion, but I hope that the attached memo. and my somewhat rambling observations on the general situation may lead you to recommendations which will not, at least, do harm to us as producers. Our cross is heavy enough as it is.

Your obedient servant,

(Signed) CHAS. W. PETERSON.

January 30, 1914.

Memorandum:

Replying to list of questions formulated by Mr. Arkell, Asst. Live Stock Commissioner.

(1), (2), (3), and (4). The information asked for affects foreign imports into Canada. The complete statistics are, therefore, available in the records of the Department of Customs at Ottawa, and can be readily obtained by Mr. Arkell as a Government official. Any figures I might quote would be more or less guesswork and not to be relied upon.

(5). There is exactly the same difference between New South Wales and other Australian mutton and that produced in New Zealand as there is between choice Shorthorn or Angus beef and inferior Jersey beef. The New Zealand sheep are reared under ideal conditions and generally on expensive land, with all that signifies. The mutton type is universal almost, although considerable attention is paid to the wool as well, but not at the expense of the former. The Western Canada breeder can easily hold his own against any sort of competition from New Zealand, as sheep are worth as much there as here or very nearly so. If the Canadian consumer at any time chooses to pay a premium for New Zealand mutton, which I am personally prepared to do, the Western breeder has no grievance. He must learn the lesson and improve his breeding and feeding, all of which will in the end be beneficial all around. Speaking for our own concern, I desire no special protection against New Zealand mutton.

The case against New South Wales mutton is entirely different. I mention New South Wales specially as practically all importations into Canada come from this source, but in time no doubt Queensland, South Australia and other portions of Australasia will also contribute; my remarks may, therefore, be taken to embrace the whole of the continent of Australia.

In the first place, we are face to face with this situation, that the production of mutton is by way of being a by-product. The main product from the sheep industry being the wool. Comparatively only a few years ago, the sheep were allowed to die a natural death on the plains and were then skinned and the carcasses left for the dingoes to consume. The next step was, that boiling down stations were erected and the carcasses were boiled and the tallow extracted. This was then the only revenue from the carcass. The final development occurred during quite recent years when refrigerating facilities were provided on the steamships and a trade in frozen mutton inaugurated. The success of this has naturally led to a little more attention being paid to the mutton qualities, but in no case at the expense of the wool. The introduction of the Rambouillet sire is about the limit of this development. The points to remember are (a) in competition with New Zealand we are competing with a legitimate industry against which we must hold our own or fail as the case may be. It will depend on our ability to produce a superior article. This is a fair proposition. (b) Against Australia we are competing purely and simply with a by-product and are, therefore, entitled to whatever protection we can obtain.

(6). Freezing does not impair the flavour and quality of the mutton in any way. In fact, it has a tendency to ripen it. I know good judges of table delicacies in England and who can afford to indulge their preferences who invariably buy New Zealand mutton during the summer time when the home grown article frequently is not satisfactorily ripened.

The important point to remember in connection with this item is, that the term "meat" should never be used in public documents dealing with the restriction, regulation or safeguarding the public interest regarding the importation of food products. Beef cannot be frozen without impairment of quality. Mutton can. Consequently what would fit the one case would be totally out of place or inadequate in the other.

(7). Prices, of course, fluctuate from time to time. The average prices for last year may, however, be regarded as fairly representative:

*Victoria*.—Has 12 million sheep. Export  $1\frac{1}{2}$  million. Some of the latter undoubtedly originated in New South Wales. Values about the same.

*New South Wales*.— $39\frac{1}{2}$  million sheep. Export about 1 million. Value of sheep range from 9 to 14s. per head. Lambs 12 to 14s. per head. Wholesale price in London  $4\frac{1}{2}$  to  $5\frac{1}{2}$ d. per pound wholesale.

*South Australia*.— $5\frac{1}{2}$  million sheep. Export 168,500 head. About same values as above.

*Queensland*.— $20\frac{1}{2}$  million sheep. Export 394,000 carcasses. Average price in Smithfield last year about  $3\frac{1}{4}$ d. per pound. Average weight of carcasses sheep 40 pounds, lambs, 34 pounds.

As throwing light on the above, it is interesting to note that the wholesale cost of Queensland mutton is made up as follows, according to a good authority:

Adding to the price paid for the sheep all expenses of treatment, and deducting the value of the skin and offal, the cost of a carcass of mutton at one of the southern works is 2d. per pound. Railage to wharf 0.04d. per pound. Freight, insurance and selling charges in London 1.125d. per pound. Total cost 3.165d. per pound. As the average price in Smithfield was 3.25d. per pound, it would show a profit of 0.085d. per pound.

*New Zealand*.— $23\frac{3}{4}$  million sheep.  $5\frac{1}{2}$  million sheep and lambs export to Great Britain. This is conceded to be the maximum export the country is capable of, and will doubtless decrease from time to time. The development of dairying as a better paying industry is largely responsible for this situation. Price of crossbred sheep 18s., lambs 15s. 6d. per head there. London prices vary from  $3\frac{1}{2}$  to  $4\frac{1}{2}$ d. per pound for mutton and 5 to 6d. per pound for lamb wholesale.

(8) As nearly as I have been able to estimate, the cost of New South Wales mutton landed in Calgary is about as follows:

Cost of mutton, dressed, landed in Vancouver . . . . .	$6\frac{1}{2}$ cents per pound
Duty . . . . .	$1\frac{1}{2}$ "
Railway rate to Calgary . . . . .	1 "
Total . . . . .	9 "

(9) This is on record.

(10) I do not know the wholesale price of mutton of this description. It varies, of course.

(11) The retail price of New South Wales mutton is precisely the same as the homegrown.

(12) It is *always* sold as homegrown. The consumer knows nothing whatever about the state of the meat market and meat production. Mutton to him or her is mutton. They only know the difference between good mutton and bad mutton, and labour under the distinct impression that the mutton is getting more and more tasteless and tough and woolly. The cause they know nothing about.



(13) Consumers certainly never demand Australian mutton and would probably be exceedingly shocked if they ascertained that they were being fed on nothing else.

(14) My impression is that the Australian mutton is now invading even the Montreal market. It may therefore, be said to cover the whole of Canada. The market opened up in the United States for the high class mutton of Eastern Canada owing to removal of duty, will doubtless have the effect that the bulk of the Ontario mutton will be exported and the consumers there gradually taught to rest satisfied with the Australian imitation of that article.

(15) It is sold and may be sold in any quantity necessary. It will absolutely strangle the local sheep industry in time. No breeder in America can live against this class of competition, unless a public demand for high grade mutton can be stimulated and we can get our prices on the basis of quality.

(16) My personal judgment is, that the packers would be particularly pleased if the whole Canadian sheep industry could be strangled in one grasp, thus leaving them a highly remunerative business in selling Australian mutton at the same price as homegrown mutton. Popularly speaking, they now have a "soft snap." They do not wish to strangle sheep breeding altogether perhaps. It is possible that they are quite satisfied with the present position of affairs, which is, that there is only an infinitesimal quantity of mutton bred in the country, yet sufficient to create the impression that sheep breeding is an important industry, and still the volume of output to be bought at a higher price than the Australian stuff is not large enough to worry the packers, who, through one excuse and another, frequently refuse absolutely to buy on the pretext that they are fully supplied and who naturally have it in their power to discourage any development in Canadian breeding by making the proposition uncertain and consequently unattractive. An attitude entirely at variance with the anxiety exhibited before the Australian importation began, when they would go to any length to induce people to go into sheep.

(17) I would not venture to express any opinion, this being entirely a matter of statistics. The best information would be to estimate consumption on the basis of population, and then ascertain from the freight traffic department on the Canadian Pacific railway the quantity of mutton carried to distributing points in the West, check this with the Customs import statistics, and the remainder will be the local production, which is very small. The Provincial Departments of Agriculture could possibly supply the information.

(18) It would be unreasonable for sheep breeders in Canada to ask for restrictions in regard to the importation of foreign mutton. We must accept that phase of the situation as it is and bow to the maxim of "the greatest good to the greatest number." We are, however, entitled to ask for the same measure of *consideration* (I shall not call it "protection") which is freely accorded the honest manufacturer and packer of other food products. As a food product, I cannot see the difference between a can of tomatoes and a carcase of mutton. In the one case the law steps in and says that the can must bear a label showing *exactly* what it contains. In the other case, the packer or butcher (in the West these terms mean the same thing, as the retail trade in meat is largely and, in most places, entirely in the hands of the wholesaler) may with impunity defraud the consumer and sell him the most inferior mutton the world produces, parading it, brazenly or by inference, as home product.

It may be argued that the consumer will know good mutton from bad and will refuse to purchase an inferior article. This does not by any means follow. It is only when an industry such as this becomes highly organized and the product is graded into a dozen different qualities, and cities become large enough to support retailers catering to different tastes and purses, that it is possible for the consumer to pick and choose. In Western Canada he takes what mutton is given him, and if he does not like it, he either stops buying mutton or gradually forgets what good mutton tastes like and is happy in ignorance. There is no satisfaction in Calgary, for instance, of changing from one Pat Burns shop to another, or even to any other



butcher, knowing that the entire wholesale trade is supplied by one of the two or three large packers. Besides, if such were the case, there would be no necessity for many of the provisions of laws dealing with purity of food products or the marking of merchandise.

This brings me to the remedy, namely, that in some way, which I leave to the proper authorities to design, shops handling foreign mutton should be so designated or the mutton marked with the name of origin, or both. Or the cuts served the consumer might be wrapped in paper having printed on it the origin. The principle should be laid down that the consumer is entitled to know what he is buying. I think that there is ample precedent for such a course, and, knowing how the Government dislike pioneering in legislation, I may mention that, if I am not very much mistaken, the British Board of Agriculture imposed some such restriction in connection with the retail sale of foreign meat some years ago at the instigation of home breeders. If I had time enough to give consideration and investigation to this matter, I think that I could draft a bill which would solve the situation and, at the same time, impose no unreasonable hardship on either packer or consumer.

Respectfully submitted,

(Signed) CHAS. W. PETERSON.

The following is a list of the questions referred to, formulated by Mr. Arkell, Asst. Live Stock Commissioner:—

- (1) Approximately how many carcasses of frozen mutton were received at B.C. ports last year?
- (2) How many for the three succeeding years?
- (3) Do these come mostly from Australia or New Zealand?
- (4) Is any mutton of this nature imported through the United States?
- (5) What is the quality of this mutton, especially compared with the home-grown western product? Can a difference be distinguished between the Australian and the New Zealand?
- (6) In your estimation does freezing impair the flavour and quality of the flesh?
- (7) What is the price per carcass in Australia or New Zealand?
- (8) What is the approximate cost per carcass of transportation to Canada?
- (9) What is the duty?  
In your estimation, should it be increased or lowered?
- (10) What is the wholesale price per carcass in British Columbia, Alberta, Saskatchewan and Manitoba?
- (11) What is the retail price? Kindly compare this with the price of home-grown western mutton.
- (12) Is it ever sold under the guise of home-grown?
- (13) Do consumers ever especially demand it? If so, why?
- (14) How far east is it sold extensively?
- (15) Is it sold in sufficient quantities to injure domestic production of sheep in the west?
- (16) Is it imported in quantities merely to cope with consumption or do the packers show a preference for it and in so doing neglect purchasing as freely as they could the home-grown in the west?
- (17) How much below the demand is the supply of home-grown mutton in the western provinces?
- (18) Do you think a restriction should be placed on the importation of frozen mutton? If so, how can you justify such restriction and what remedy would you suggest?

## APPENDIX No. 26.

By H. S. ARKELL, Assistant Live Stock Commissioner, Department of Agriculture.  
In regard to the Shipments of Meat within the Provinces of Canada.

## ONTARIO TO BRITISH COLUMBIA.

Date.	Bacon and Pork.	Beef.	Mutton and Lamb.	Miscel- laneous.
1913.	Lb.	Lb.	Lb.	Lb.
Feb. 1.....		126,840		
" 3.....		79,110		
" 5.....		35,960		
" 6.....		34,400	2,290	
" 12.....		24,200		32,350
" 13.....		34,770		32,530
" 14.....		32,070		
" 15.....		185,120		24,329
" 22.....		50,670		
" 24.....		89,810		
" 25.....		32,060		
Total.....		725,010	2,290	89,209

## ALBERTA TO BRITISH COLUMBIA.

	Lb.	Lb.	Lb.	Lb.
Feb. 1.....		7,641		
" 2.....	5,271	35,989	545	305
" 3.....	14,512	51,905		
" 4.....	8,470	43,304	1,235	1,273
" 12.....	3,505	26,126	2,686	
" 13.....	767	11,434	221	173
" 17.....	18,062	50,317		
" 27.....	5,567	38,894	39	1,067
" 28.....		22,390		
Total.....	56,154	288,000	4,726	2,818

## QUEBEC TO BRITISH COLUMBIA.

	Lb.	Lb.	Lb.	Lb.
Feb. 1.....	25,306			7,250
Grand Total.....	81,460	1,013,010	7,016	99,277

Amount of meat shipped into British Columbia from Ontario, Alberta and Quebec..... 1,200,763

SHIPMENTS of Meat within the Provinces of Canada—*Continued.*

## ONTARIO TO ALBERTA.

Date.	Bacon and Pork.	Beef.	Mutton and Lamb.	Miscel- laneous.
1913.	Lb.	Lb.	Lb.	Lb.
February 15.....		24,910		
" 25.....		24,050		
Total.....		48,960		

## QUEBEC TO MANITOBA.

1913.	Lb.			
February 1.....	25,000			
Total.....	25,000			

## MANITOBA TO SASKATCHEWAN.

1913.	Lb.	Lb.	Lb.	Lb.
February 1.....		412		
" 2.....	5,579	4,511	5,718	15,923
" 3.....	545			2,676
" 4.....	1,125			
" 5.....				180
" 6.....	229			119
" 7.....	5,044	5,556	2,100	2,182
" 8.....	337			529
" 10.....	255			1,930
" 11.....	2,354	520	300	4,914
" 12.....	250			
" 13.....	104			298
" 14.....	4,629	15,511	1,450	5,988
" 15.....	736			406
" 17.....	1,191	166	49	3,190
" 19.....	3,838	1,108	101	5,049
" 20.....	968			1,292
" 22.....	5,569	11,942	210	3,654
" 24.....	50			
" 25.....				288
" 26.....	895	274	212	880
" 27.....	991	217	78	1,304
" 28.....	3,457	7,664	1,054	1,109
Total.....	39,146	47,881	11,332	51,911

## ONTARIO TO SASKATCHEWAN.

	Lb.	Lb.	Lb.	Lb.
February 15.....		29,840		39,540
" 21.....				22,460
Total.....		29,840		62,000

## BOARD OF INQUIRY INTO

SHIPMENTS of Meat within the Provinces of Canada—*Continued.*

## ALBERTA TO SASKATCHEWAN.

Date.	Bacon and Pork.	Beef.	Mutton and Lamb.	Miscel- laneous.
1913	Lb.	Lb.	Lb.	Lb.
February 8.....	469	218	.....	266
Grand Total.....	39,615	77,937	11,332	114,177

Amount of meat shipped to Saskatchewan from the Provinces of Ontario, Manitoba, and Alberta..... 243,063<sup>AD</sup>

## ONTARIO TO NEW BRUNSWICK.

1912	Lbs.	Lbs.	Lbs.	Lbs.
December 2.....	8,525	430	.....	8,104
" 3.....	591	.....	.....	3,261
" 5.....	1,190	1,130	.....	9,349
" 4.....	.....	.....	.....	263
" 6.....	.....	3,270	.....	41,926
" 7.....	1,678	5,025	.....	2,766
" 9.....	.....	508	.....	7,815
" 10.....	.....	680	.....	25
" 11.....	.....	.....	.....	2,440
" 12.....	.....	.....	.....	18,515
" 13.....	.....	3,000	.....	6,940
" 14.....	2,946	10,494	.....	2,631
" 16.....	.....	1,096	.....	2,049
" 17.....	.....	.....	.....	730
" 18.....	.....	.....	.....	3,496
" 19.....	385	.....	.....	32,555
" 21.....	850	8,647	.....	12, 77
" 23.....	550	6,785	.....	6,505
" 24.....	.....	.....	.....	1,045
" 26.....	335	.....	.....	2,810
" 27.....	.....	1,250	.....	30,000
" 28.....	1,070	3,516	.....	2,025
" 30.....	.....	21,900	.....	6,500
Total.....	18,120	67,729	.....	204,027

## ONTARIO TO NOVA SCOTIA.

1912	Lbs.	Lbs.	Lbs.	Lbs.
December 1.....	.....	.....	.....	1,760
" 2.....	2,971	25,870	.....	3,190
" 5.....	530	.....	.....	27,155
" 6.....	.....	13,745	.....	30,710
" 7.....	1,681	1,820	.....	5,631
" 9.....	1,100	5,530	.....	2,500
" 10.....	30,600	3,250	.....	5,690
" 11.....	.....	.....	.....	244
" 12.....	.....	31,690	.....	30,880
" 13.....	.....	330	.....	.....
" 14.....	795	.....	.....	7,495
" 16.....	555	420	.....	31,666
" 17.....	.....	.....	.....	520
" 18.....	151	16,600	.....	46,245
" 19.....	1,160	50	.....	5,340
" 21.....	1,195	.....	.....	391

## SHIPMENTS of Meat within the Provinces of Canada—Continued.

## ONTARIO TO NOVA SCOTIA—Continued.

Date.	Bacon and Pork.	Beef.	Mutton and Lamb.	Miscellaneous.
1912				
December 23.....	1,180	1,300		3,181
" 24.....	1,230			18,670
" 26.....	6,932	2,850		37,070
" 27.....				1,000
" 28.....	796	214		50
" 30.....	100			350
" 31.....				8,199
Sydney.....	50,976 4,019	103,669 32,905		267,927 271,900
Total.....	54,995	136,574		539,827

## ONTARIO TO SYDNEY, NORTH SYDNEY AND SYDNEY MINES.

	1912	Lbs.	Lbs.	Lbs.	Lbs.
December 2.....					20,009
" 5.....					21,350
" 7.....		1,630	3,625		27,100
" 9.....			1,250		
" 12.....			5,000		
" 13.....		449	7,200		54,549
" 16.....			7,000		30,140
" 21.....		630	3,350		33,435
" 23.....			700		
" 24.....					25,200
" 26.....					30,000
" 27.....					29,870
" 28.....		1,310	4,780		265
		4,019	32,905		271,900

## ONTARIO TO PRINCE EDWARD ISLAND.

Date.	Bacon and Pork	Beef.	Mutton and Lamb.	Miscellaneous.
1912.				
December 5.....	660 lbs.			685 lbs.
" 2.....				140 "
" 23.....		1,600 lbs.		
" 31.....	323 lbs.			
	983 lbs.	1,600 lbs.		825 lbs.



*Movements of Meat from Maritime Provinces—West, 1912.*

December 3.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 131; weight, 2,400 pounds dressed hogs.

December 4.—From Charlottetown, P.E.I., to Montreal, P.Q.: Number of packages 3; weight, 695 pounds lambs and tongues.

December 5.—From St. John, N.B., to Winnipeg, Man.: Number of packages, 357; weight, 20,000 pounds frozen lamb and mutton.

December 5.—From Summerside, P.E.I., to Lac au Saumon, P.Q.: Number of packages, 2; weight, 700 pounds dressed hogs.

December 5.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages: 144; weight, 24,500 pounds dressed hogs.

December 7.—From St. John, N.B., to Winnipeg, Man.: Number of packages, 539 carcasses lamb and mutton, 4 barrels hearts, 1 barrel tongue; weight 20,000 pounds all frozen.

December 10.—From Sussex, N.B., to Winnipeg, Man.: Number of packages, 577; weight, 30,000 pounds lamb and mutton.

December 11.—From Charlottetown, P.E.I., to Montreal, P.Q.: Number of packages, 5; weight, 520 pounds leaf lard.

December 12.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 127; weight, 24,000 pounds dressed hogs.

December 16.—From Charlottetown, P.E.I., to Montreal, P.Q.: Number of packages, 2; weight, 300 pounds beef and lamb tongues.

December 16.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 145; weight, 24,500 pounds dressed hogs.

December 19.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 131; weight, 24,000 pounds dressed hogs.

December 21.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 129; weight, 24,300 pounds dressed hogs.

December 21.—From Charlottetown, P.E.I., to Salmon Lake, P.Q.: Number of packages, 3; weight, 950 pounds dressed hogs.

December 24.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 156; weight, 24,000 pounds dressed hogs.

December 27.—From Charlottetown, P.E.I., to Montreal, P.Q.: Number of packages, 1; weight, 50 pounds pigs' hearts.

December 27.—From Charlottetown, P.E.I., to Hull, P.Q.: Number of packages, 145; weight, 24,000 pounds dressed hogs.

December 28.—From Charlottetown, P.E.I., to Calgary, Alta.: Number of packages, 225; weight, 14,520 pounds canned chicken.

December 31.—From Charlottetown, P.E.I., to Montreal, P.Q.: Number of packages, 664; weight, 24,500 pounds dressed lambs.

Total for month of December, 1912, 254,535 pounds.

*From the Maritime Provinces to Liverpool, England.*

December 3.—From Charlottetown, P.E.I., to Liverpool, England: Number of packages, 400; weight, 19,200 pounds canned mutton.

December 6.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 235; weight, 11,424 pounds canned beef.

December 7.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 300; weight, 14,400 pounds canned beef.

December 12.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 435; weight, 30,660 pounds canned beef and mutton.

*London, England.*

December 14.—From Charlottetown, P.E.I., to London, Eng.: Number of packages, 250; weight, 17,500 pounds canned mutton.

*Liverpool, England.*

December 16.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 200; weight, 17,000 pounds canned mutton.

December 16.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 200; weight, 14,000 pounds canned beef.

December 21.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 217; weight, 8,416 pounds canned beef and mutton.

December 24.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 862; weight, 41,368 pounds canned mutton and beef.

December 24.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 438; weight, 21,024 pounds canned mutton.

December 26.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 191; weight, 9,169 pounds canned beef and mutton.

December 27.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 270; weight, 18,900 pounds canned beef.

December 31.—From Charlottetown, P.E.I., to Liverpool, Eng.: Number of packages, 148; weight, 7,104 pounds canned beef and mutton.

Total for month of December 1912, 230,182 pounds.

# APPENDIX No. 27.

## COST OF BEEF PRODUCTION.

CENTRAL EXPERIMENTAL FARM, OTTAWA.

Year.	Total No. of steers.	No. days fed.	Daily gain per steer	Cost per cwt.	Selling price per cwt.	Cost of feed per steer.	Profit per steer.	Loss per steer.	Cost of 1 lb. gain.
				\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	Cents.
1905-6.....	96	177	2.03	3 88	4 96	17 03	9 03	.....	5.19
1907-8.....	51	259	2.06	4 68	5 03	21 57	3 41	.....	5.52
1908-9.....	32	169	1.98	3 70	4 89	20 13	3 41	.....	6.82
1909-10.....	32	425	1.59	5 06	6 16	30 70	4 24	.....	6.81
1910-11.....	38	188	1.76	5 40	6 90	21 87	6 55	.....	7.32
1911-12.....	15	259	1.31	6 62	8 06	40 56	.....	1 68	11.99
1912-13.....	26	356	1.54	6 17	7 75	42 42	4 11	.....	7.69

### NAPPAN, N.S.

1908-9.....	50	165	1.80	4 49	5 55	13 10	3 50	.....	7.83
1909-10.....	64	165	1.46	4 32	5 65	23 92	3 87	.....	9.90
1911-12.....	64	121	1.64	4 65	6 50	26 40	9 58	.....	9.74
1912-13.....	65	108	2.04	4 70	6 56	19 97	14 50	.....	9.44

### BRANDON, MAN.

1909-10.....	36	155	1.28	3 50	5 50	23 90	5 09	.....	13.13
1910-11.....	40	154	1.19	3 25	4 97	17 81	5 35	.....	10.58
1911-12.....	21	167	1.30	3 00	6 30	19 57	23 50	.....	8.9
1912-13.....	19	167	1.22	4 25	6 75	23 51	13 20	.....	11.7

### LACOMBE, ALTA.

1909-10.....	20	157	1.48	3 66	5 00	26 26	28 93	.....	11.25
1910-11.....	18	109	1.72	3 65	5 75	14 00	14 35	.....	7.42
1911-12.....	20	155	1.80	4 00	7 00	26 44	18 12	.....	9.93
1912-13.....	12	109	1.52	4 75	7 50	18 57	11 72	.....	11.09

## EXPLANATORY NOTES RE BEEF PRODUCTION.

CENTRAL EXPERIMENTAL FARM, OTTAWA.

1905-6.—The total number of 96 steers were carried on in six experiments, composed as follows: 25 steers into three lots, choice, medium and poor; 20 steers into two lots, heavy *vs.* light feeding; 14 steers, two lots, choice, *vs.* poor feeders; 15 steers, two lots, long *vs.* short keep; 22 steers baby beef, four lots, limited *vs.* full ration.

1907-8.—Fifty-one steers were divided into two experiments, as follows:—12 steers, baby beef, limited *vs.* full ration; the rest of the steers on a frozen wheat test.

1908-9. Thirty-two steers were divided into two experiments, namely, 11 steers for baby beef, limited *vs.* full ration; and 21 steers for the testing of corn, oil cake and gluten on short keep steers.

1909-10.—Thirty-two steers, ten of which were on a long *vs.* short keep experiment and the remainder on baby beef experiment.

1910-11.—Thirty-eight steers, all testing baby beef.

1911-12.—Fifteen steers, long *vs.* short keep.

1912-13.—Twenty-six steers, testing grades of four breeds in the feeding of yearling steers.

N.B.—In the selling price of all beef for all the farms there is 5 per cent shrinkage on above quoted figures.

N.B.A.—In the column, "Cost to produce 1 lb. Gain," no account has been taken on labour, interest, depreciation, etc., but the above calculation made altogether on the cost price of the foodstuffs.

## COST OF PORK PRODUCTION.

## CENTRAL EXPERIMENTAL FARM.

Year.	No. Head.	Days fed.	Daily gain pr. hd.	Value at start cwt.	Value sold cwt.	Cost feed pr. hd.	Profit pr. hd.	Loss pr. hd.	Cost pr. 1 lb. gain.
1905-6.....	16	85	.61	.....	.....	3 19	.....	.....	5.9
1907-8.....	70	56	.86	.....	.....	2 14	.....	.....	4.4
1908-9.....	150	23	1.31	.....	.....	1 16	.....	.....	4.9
1909-10.....	120	39	.52	.....	.....	2 31	.....	.....	3.59
1911-12.....	75	56	.65	.....	.....	1 74	.....	.....	4.7
1912-13.....	64	69	1.06	.....	.....	3 99	.....	.....	4.91

## NAPPAN, N.S.

1912-13.....	10	132	.92	.....	.....	6 73	.....	.....	5.4
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## BRANDON, MAN.

1910-11.....	28	86	.97	.....	.....	3 24	.....	.....	3.75
1912-13.....	8	60	.69	.....	.....	2 50	.....	.....	5.83

EXPLANATORY NOTES *RE* PORK PRODUCTION.

## CENTRAL EXPERIMENTAL FARM.

1905-6.—The sixteen pigs on experiment were for the testing of mangels *vs.* sugar beets *vs.* meal *vs.* herbageum. In this year, as in all subsequent years, no valuation of the pigs was set at the commencement of experiment, nor were they sold in block immediately from the experiment. Consequently the above figures are all that are available.

1907-8.—The 70 head of swine in the series of experiments for this year were for the testing of frozen wheat against the regular meal mixture.

1908-9.—The 150 head of swine used in experiment were carried over three experiments for the testing of different meal mixtures against the standard.

1909-10.—The 120 head of swine for this year were for the testing of different meal mixtures against the standard.

1911-12.—The 75 hogs for this year were divided into five lots, testing meal *vs.* meal and milk *vs.* turnips raw *vs.* turnips cooked *vs.* mangels raw.

1912-13.—Sixty-four head of swine were divided as follows:—14 for summer feeding in the testing of green feed, and 50 for winter feeding in the testing of chop (barley and oats) *vs.* turnip *vs.* milk *vs.* middlings *vs.* feed flour.

#### NAPPAN, N.S.

The only experiment worth reporting was that of 1912-13, when 10 pigs were divided so as to give one lot double the amount of skim milk which the other lot received. The most economic gains were made where six pounds of milk (the double lot) was fed.

#### BRANDON, MAN.

1910-11.—Twenty-eight head were divided into five lots for the testing of tank-age *vs.* mixture of pease, oats and barley, *vs.* chopped barley.

1912-13.—This was a test of barley *vs.* feed flour, both fed on the middlings foundation.

#### AGASSIZ, B.C.

A very good experiment at Agassiz, carried on in 1912-13 was not reported in such detail as to be able to give all the above figures. This was a test of rice meal *vs.* the regular grain mixture.

### COST OF MUTTON PRODUCTION.

#### CENTRAL EXPERIMENTAL FARM, OTTAWA.

Year.	No. Lambs	No. days. fed.	Daily gain per Lamb	Cost per cwt.	Selling price per cwt.	Cost feed pr. lb.	Profit per Lamb.	Loss per Lamb.	Cost pr. 1 lb. gain.
			Lb.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	\$ cts.	Cents.
1909-10.....	27	124	.27	6 25	7 50	2 60	1 22		7.86
1910-11.....	27	90	.23	5 00	7 25	2 09	1 58		9.09
1911-12.....	29	114	.28	5 75	7 25	2 53	1 38		7.75

#### Charlottetown, P.E.I.

1911-12.....	30	90	.119	4 50	5 66	1 30	0.28		14.05
1912-13.....	83	88	.074	4 50	6 25	1 44	0.48		24.00

#### Nappan, N.S.

1912-13.....	40	76	.28	5 75	7 50	1 99	1.43		9.14
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#### Brandon, Man.

1911-12.....	112	126	.17	5 80		2 18			12.00
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#### Lethbridge, Alta.

1911-12.....	250	112	.262	3 80	6 25	2 07	1.34		7.05
1912-13.....	285	117	.213	3 75	6 50	2 19	0.56		9.28



EXPLANATORY NOTES *RE* MUTTON PRODUCTION.

The above figures pertain to lamb feeding experiments only, as no figures are available as to the cost of rearing lambs year after year.

For the Central Experimental Farm, during the three years, Lot I in each case was fed on turnips as the basic succulent, Lot II on ensilage, and Lot III on a mixture of turnips and ensilage.

At Charlottetown, a series of tests comparing alfalfa hay, timothy hay, corn stover, roots, in conjunction with grain, was carried on in 1912. Only the first three mentioned were carried on in the previous year.

The figures quoted from Nappan represent a test of clover hay *vs.* timothy hay with and without roots.

The test at Brandon was a comparison of feeding inside *vs.* outside, and included a test of alfalfa hay, timothy hay and straw.

The tests at Lethbridge include a comparison of alfalfa hay with other roughages and include also the value of roots, grain and elevator screenings.

## COSTS OF MILK PRODUCTION (C. E. F., OTTAWA).

*Best 3 Cows of Breeds.*

Breed..	Days in Milk.	Daily yield.	Lbs. milk.	Per cent fat.	Cost of feed.	Cost 100 lbs. milk.	Cost 1 lb. butter.	Profit on cow.	Year.
		Lbs.			\$ cts.	Cents.	Cents.	\$ cts.	
Canadians.....	228	30.0	6,404	4.6	33 73	51.9	9.9	41 71	1905
	280	20.9	5,918	4.6	46 71	78.9	14.5	30 14	1906
	309	23.8	7,359	4.3	44 92	61.8	12.	57 00	1908
	336	20.4	6,887	4.4	50 78	75.5	14.	56 24	1909
	339	21.7	7,465	4.6	63 42	84.6	15.6	55 73	1910
	310	21.5	6,611	4.75	61 42	93.8	16.8	46 28	1911
	298	25.2	7,508	4.60	49 90	66.8	13.1	71 50	1912
	327	21.2	6,813	4.50	53 33	78.8	14.9	76 66	1913
Average.....	303	23.1	6,871	4.54	50 53	74.0	13.9	54 41	
Ayrshires.....	287	28.7	8,942	3.75	44 17	49.2	11.1	47 47	1905
	259	28.8	7,256	4.1	46 13	65.8	13.1	41 73	1906
	290	29.1	8,466	3.86	42 39	49.9	10.9	63 31	1908
	318	26.3	8,280	3.9	52 79	64.	13.8	62 31	1909
	307	28.8	8,801	3.8	66 71	75.3	16.6	54 43	1910
	279	28.9	8,091	3.98	65 25	80.9	17.2	48 45	1911
	324	29.4	9,427	4.22	60 94	64.8	13.1	87 53	1912
	467	26.6	11,833	3.89	80 00	66.9	14.6	107 66	1913
Average.....	317	28.3	8,887	3.94	57 30	64.6	13.8	64 11	
Guernseys.....	296	24.8	7,348	4.62	40 33	55.6	10.2	49.20	1905
	288	22.8	6,716	4.9	45 30	67.9	11.8	49 37	1906
	349	21.1	6,504	4.9	42 80	69.1	11.5	58 44	1908
	307	13.9	4,498	5.06	39 14	87.4	14.5	42 52	1909
	249	25.0	5,288	4.7	50 82	93.3	16.8	35 63	1910
	322	15.8	5,045	5.21	57.23	115.3	18.8	32 48	1911
	302	20.4	6,193	5.04	51 93	85.4	14.5	63 30	1912
	462	18.1	7,741	5.01	67 91	87.0	14.3	85 32	1913
Average.....	322	20.2	6,167	4.93	49 43	82.6	14.1	52 03	

## COSTS OF MILK PRODUCTION (C. E. F., OTTAWA)—Continued.

## Best 3 Cows of Breeds—Continued.

Breed.	Days in milk.	Daily yield.	Lbs. milk.	Per cent fat.	Cost of feed	Cost 100 lbs. milk.	Cost 1 lb. butter.	Profit on cow.	Year
		Lb.			\$ cts.	cents.	cents.	\$ cts.	
Shorthorns.....	259	20.8	5,834	3.81	39 08	75.	16.5	16 54	1905
	291	17.5	4,825	3.8	38 77	76.6	16.8	20 63	1906
	305	21.5	6,616	3.9	43 32	68.6	15.	39 38	1908
	307	23.9	7,383	3.9	52 00	73.3	16.0	47 82	1909
	320	22.7	7,170	3.8	65 51	91.3	20.6	31 77	1910
	319	21.8	6,898	3.89	63 93	94.9	20.7	28 21	1911
Average.....	300	21.4	6,454	3.9	50 44	80.	17.6	30 73	
Holsteins.....	429	31.8	14,125	3.48	84 41	60.8	14.8	115 81	1913
Grades.....	261	25.8	6,676	3.51	37 96	56.7	13.5	27 00	1905
	348	21.1	7,316	5.1	60 60	68.1	10.9	58 11	1906
	287	22.2	6,413	5.0	41 95	67.9	11.5	56 66	1908
	325	19.8	6,297	4.5	46 10	76.6	14.4	47 60	1909
	319	22.8	7,165	4.5	65 47	87.6	17.0	47 73	1910
	319	19.4	6,060	5.32	63 70	102.2	16.3	48 15	1911
Average.....	310	21.9	6,655	4.66	52 63	76.5	13.9	47 54	

## All Breeds.

No. of cows.									
35.....	254	23.2	6,015	4.04	37 89	63.1	13.5	27 72	1905
50.....	224	18.2	4,143	4.2	34 78	91.8	18.4	17 98	1906
38.....	275	19.6	5,347	4.4	38 61	78.7	15.5	35 10	1908
50.....	267	17.6	4,699	4.3	39 98	90.7	18.0	29 56	1909
65.....	276	19.1	5,174	4.2	54 03	109.6	21.9	22 92	1910
54.....	269	20.7	5,413	4.29	53 37	99.3	19.9	26 90	1911
38.....	311	20.5	6,297	4.51	51 27	84.9	16.7	50 01	1912
40.....	360	20.6	7,433	4.15	58 02	75.0	15.9	65 12	1913
46 Average.....	280	19.9	5,565	4.26	45 99	87.0	17.5	34 41	

## COST OF MILK PRODUCTION.

## CENTRAL EXPERIMENTAL FARM, OTTAWA.

The calculations of above table are based on the cost of foodstuffs alone, labour, interest, depreciation, etc., not being considered. According to close calculations these other items, including cost of handling the milk until it is ready for the consumer, would about double the cost per hundred pounds as calculated on foodstuffs only.

## APPENDIX No. 28.

SUMMARY OF INFORMATION COMPILED FROM THE ANSWERS  
RECEIVED FROM MUNICIPAL OFFICIALS IN RESPECT  
OF PUBLIC MARKETS IN CANADA.

## NEW BRUNSWICK.

*Moncton* (February 2, 1914).—There is one market building in the city of Moncton, covering about 11,000 square feet. It is about a quarter-mile from the Inter-colonial depot and the street railway passes its door. The market is used both by producers and traders; part being set aside for the use of producers and traders occupying three stalls.

*St. John* (February 2, 1914).—St. John's market is 150 x 400 feet, the market building being entirely enclosed and occupying the full area of the land. It is situated a quarter-mile from railway station and 30 feet from street railway. It is used exclusively for the sale of meats, vegetables, fish and fowl. The annual rentals therefrom all sources are \$16,201.34. The market building and lot are valued at \$150,000.

## QUEBEC.

*Montreal* (February 5, 1914).—There are in Montreal five markets, exclusively reserved for the sale of meat, fish, fruits, vegetables, provisions and farm products, which same are known as the Bonsecours, St. Antoine, St. Lawrence, St. James and St. Jean Baptiste markets, including one hay and two cattle markets. The area of land of each market and the size of buildings thereon are as follows, the Bonsecours market including the Central fish market and the following grounds adjacent, viz., Le Royer and Jacques Cartier squares:—

	Area of Land.	Size of Buildings.
Bonsecours Market. . . . .	72,198 sq. ft.	35,002 sq. ft.
Central Fish Market. . . . .	12,230 "	6,034 "
Le Royer Square. . . . .	13,801 "	Platforms.
Jacques Cartier Square. . . . .	37,993 "	"
St. Lawrence Market. . . . .	18,839 "	17,268 sq. ft.
St. Antoine Market. . . . .	60,022 "	15,893 "
St. James Market. . . . .	22,493 "	8,048 "
St. Jean Baptiste. . . . .	11,250 "	8,320 "
Hay Market. . . . .	35,661 "	1,100 "
Eastern Cattle Market. . . . .	3 acres.	
Western Cattle Market. . . . .		

The Bonsecours market is situated in the centre of the city, fronting the river St. Lawrence, in proximity to market boats and Canadian Pacific Railway freight and passenger depots. The St. Antoine market is situated close to the Grand Trunk Railway freight and passenger depots. All the other markets are scattered throughout the city, with every facility of connection with tramway lines running in all directions. The five meat markets are exclusively reserved for farmers and gardeners coming to the city to sell their produce, "excepting butchers and fruit merchants occupying stalls in said markets." There have been accommodated at the Bonsecours market, which is the most extensive, up to 1,500 gardeners and farmers' wagons in one market day, which is generally held every Friday, and the approximate value of produce contained in each wagon was estimated to be between \$35 and \$40. No statistics are available as to the amount of business done at these markets.

*Sherbrooke* (January 30, 1914).—In Sherbrooke there is one market, with the following buildings: One main building, 60 feet x 100 feet; one meat market building, 80 feet x 40 feet. The total land area of the market is 150,000 square feet. The market is located 300 feet from railway station and 30 feet from the street railway. The market is used for the sale of commodities both by producers and traders (traders about 10 per cent). Average weekly business done, \$5,000.

*Three Rivers* (April 9, 1914).—There are two markets in Three Rivers: a produce market, which has a land area of 200 x 200 and a building 130 x 150 feet; and a hay market, 370 x 100 feet, without any building. These markets are situated a mile from the railroad and are utilized by farmers who come in to sell their products. In the produce market there are two shops for butchers and hucksters, who can buy on the market only during certain hours. No statistics available as to the extent of business done.

#### ONTARIO.

*Berlin* (February 3, 1914).—There is one market in Berlin, with an area of 4 acres and a building 66 x 250 feet. The market is located about 3,000 feet from the railway station and on the street railway line. This is a producers' market only. There is one market a week in the winter time, being held on Saturday mornings; in the summer there are two markets a week—on Wednesday and Saturday mornings. The extent of the business done is between \$3,500 and \$4,000 weekly.

*Brantford* (January 29, 1914).—In Brantford there is one market, about 60 feet square, located on the street car lines and quite close to the Grand Trunk railway and about half-a-mile from the T. H. & B. railway and H. and B. electric railway. The market is used for the sale of commodities both by producers and traders. No statistics are available as to the amount of business done.

*Chatham* (May 26, 1914).—There is one market in Chatham, located about an eighth of a mile from the Canadian Pacific railway station and three-quarters of a mile from Grand Trunk railway station, and fronts on the street railway. The area of the market grounds is about 1½ acres, and there is one market building, 350 feet x 40 feet. The market is open principally on Wednesdays and Saturdays, and is used for the sale of commodities by producers only. The market building is furnished with good lavatories and is heated and lighted when necessary. The market service is considered satisfactory.

*Fort William* (February 9, 1914).—There is no regular market building in Fort William, but instead during the summer months the skating rink building is used; this is admirably situated and adapted for the purpose of a summer market. This building is located only a few hundred yards from the three Transcontinental railroads, viz., the Canadian Pacific, Grand Trunk Pacific, and Canadian Northern railways, and about 1,000 feet from the electric street railway line. Land has been purchased and it is the intention to erect a suitable market building in the near future. As to the extent of business done at the summer market there are no statistics, but only a few farmers have taken advantage of it.

*Galt* (May 26, 1914).—In Galt there is one market, of an area of about two acres, and it is located about a quarter-mile from the railroad and an eighth of a mile from the street railway. It is used for the sale of commodities to the extent of about ninety per cent. No statistics are available as to the amount of business done.

*Guelph* (February 18, 1914).—There is one market in Guelph. Its location is adjacent to the Grand Trunk Railway station and the street railway. It is used for the sale of commodities both by producers and traders, but in what proportion cannot be stated, nor is there any information available as to the amount of business done on this market.



*Hamilton* (February 14, 1914).—In Hamilton there are two markets, viz., Central market, with a land area of 138,254 square feet, and John street market, with an area of 41,625 square feet. The size and description of the buildings situated on the Central market place are as follows:—Butter, egg and poultry market building (for farmers, their wives and relatives), 44 x 62 feet—1 storey, brick; wholesale butchers' pavilion, 43 x 268 feet—1 storey, steel structure, equipped with overhead tracking for carrying meat to scale house situated at one end; weigh scale building and office, at end of butchers' pavilion, 22 x 32 feet—1 storey, brick, equipped with platform scales and 10-ton scale; lavatory, 20 x 27 feet—2 storey brick building, for the accommodation of those attending the market and the general public; Central market sheds, situated at east end of market, containing 2 double stalls, of 17 feet and 18 feet fronts, by 12 feet deep, and 9 single stalls, with 8 feet and 9 feet fronts, by 12 feet deep; Central market hall, 300 feet long, 57 feet wide and 75 feet high, containing 72 single stalls, 16 feet deep and 16 feet high. The building at the John street market is an office and scale building for weighing hay, straw, etc., and coal, being of brick and 1 storey high, and equipped with two 10-ton platform scales. The Central market is located in the centre of the city, two-thirds of a mile from the Grand Trunk railway station, four city blocks from Canadian Pacific railway, Michigan Central railway, and Toronto, Hamilton and Buffalo station, and four city blocks from terminal station of the Electric railway, while the city electric street railway runs along two sides of the market square. The location of the John street market is in the centre of the south portion of the city, being distant one mile from the Grand Trunk station, one block from Toronto, Hamilton and Buffalo station, four blocks from Electric Terminal station, and two blocks from street railway. The Central market is used—the open market by producers to the extent of 90 per cent, and by hucksters 10 per cent; the butter market, by producers only; the butchers' pavilion, by producers only; the Central market sheds and Central market hall, by retailers. The John street market is used by producers only. At the Central market the extent of business done is from \$5,000 to \$25,000 on winter market days, and from \$20,000 to \$35,000 on summer market days, the market being held three days a week. At the John street market the business done amounts to about \$1,000 daily. In 1913, the fees collected at the Central market amounted to \$7,902.96, and at the John street market to \$1,275.70. The value of the Central market hall is \$30,000, and of the land on which it is situated, \$60,000. The butter, egg and poultry market building is valued at \$10,000, and the wholesale butchers' pavilion at \$20,000, the value of the building on the John street market being \$2,000.

*Kingston* (February 12, 1914).—There are two markets in Kingston, one a hay market and the other a general commodity market, three-eighths of an acre in extent, with a covered building 52 x 62 feet. The uncovered portion of this market is used for selling farm produce of all kinds, and the covered portion mainly for a market for the islands (Wolfe, Howe and Amherst), the produce from which is brought to market by boat in summer and by sleigh in winter. The market is situated a few yards from the railway station, and is used for exchange between producer and consumer. No statistics are available as to the amount of business done.

*London* (February 12, 1914).—There is a city market in London, covering an area of 12,000 square yards, and accommodating 600 waggons in the open market, 200 women in the butter and egg pavilion, and 40 waggons in the butcher pavilion. The egg and butter pavilion is a frame structure having a floor area of 3,080 square feet. This building is 140 feet long, and has seats along the inside for 200 women who come with baskets of butter, fruit, etc., for sale. The butcher pavilion is an iron structure, shed type, open at sides and ends, having a floor area of 3,900 square feet, and is capable of taking 40 waggons, backed in along the sides, a 10-foot wide walk running down the centre. The main market building is of brick, with ground floor and basement, having a floor area of 14,870 square feet. The ground floor has 18



stalls, which are rented to the retail butchers for \$15 per month each; the basement has 20 stalls, rented to the butter and egg dealers for \$7 per month each. The weigh scale building is of brick, with a floor area of 1,000 square feet, and forms housing for three sets of scales, one for waggons, one for bags of grain, and one for small articles. The new comfort station is a brick and cement building of substantial design, with ground floor and basement well fitted up. The floor area is 1,760 square feet. The ground floor is set aside for women and the basement for men. This building was opened this year; the other buildings have been up several years. The total cost of buildings on the market square approximates \$25,700. The city owned the greater part of the area now used, but portions were given by private owners, conditionally that the land was used for market purposes only, for all time. There is no record of any payment. The cost of operation and maintenance amounted to \$2,875, including repairs, etc., last year, and will cost about \$4,000 next year on account of the new comfort station with its attendants. The market clerk's salary is \$750 per year, and the weigh scales clerk's salary is \$800 per year. Last year (1912) the revenue amounted to \$6,530, made up as follows, viz.: Rent of stalls, \$4,920; fees from weigh scales, \$1,130; rent of spaces, \$480. The market is central to the business area, and half a block from the main thoroughfare.

*Ottawa* (February 6, 1914).—There is only one public market in Ottawa. The market square, with the streets used for market purposes, cover an area of 33,691 square yards. On this ground there is one building, 60 feet x 200 feet, which is occupied by butchers; one building, 55 feet x 150 feet, in which there is a public office, public weigh scales, with the balance of the ground floor rented to butchers and fish dealers. Over this there is a large public hall. Adjoining this building there is a modern lavatory, 10 feet x 40 feet, and six small buildings, 25 feet by 25 feet each, used for the sale of dairy produce, poultry and fruit. The market is centrally located, being 1,100 feet from the Grand Trunk central passenger depot and 500 feet from the Grand Trunk railway freight shed. Street cars pass three sides of the market. The market is used exclusively for the sale of farm produce and fish. About one-fourth of those doing business on the market are hucksters and traders, the balance being farmers and gardeners. Figures relating to the amount of business done on the market are not available, but the market inspector estimates that there is a greater quantity of produce sold on this market direct from the producer to the consumer than on any other market in Canada.

*Owen Sound* (February 2, 1914).—There is one open market in Owen Sound and it is located about the centre of the town, a quarter of a mile from the railway stations. The market is used by producers only. No statistics are available as to the amount of business done in this market.

*Peterborough* (February 12, 1914).—In Peterborough there is one public market. The area of land used for the open market is about 290 x 150 feet, besides the land occupied by the market building, which is approximately 125 x 60 feet, with an extension of about 45 x 30 feet. The market is centrally located, being about 500 yards from one railway station and about 350 from the other. The street railway runs past it. The market is used almost entirely by producers. No statistics are available as to the amount of business done.

*Sault Ste. Marie* (May 26, 1914).—There is in Sault Ste. Marie one market, with a market hall, on King street, being located a quarter mile from railway station. The market is used for the sale of commodities by producers. Everything is sold out on market day.

*St. Catharines* (June 3, 1914).—In St. Catharines, there is one market, the ground area of which is 320 x 400 feet, with one building 30 x 40 feet, situate on King and

Church streets, about fifty yards from the street railway. The market is used by producers only; about 400 wagons attending each week. No other figures are available as to the amount of business done.

*Toronto* (January 31, 1914).—The city operates one produce market, viz., St. Lawrence, which is divided into two sections, being approximately 1,500 feet x 300 feet over all. The market is located on Front street, half a mile from railway station, but directly on street car line. The large proportion of produce offered for sale is by farmers, who express goods to the market, coming on same train to dispose of them. The market is well heated and equipped with baskets for the convenience of selling. The space occupied by farmers is absolutely free; notwithstanding this, Saturday is about the only day they take advantage of this privilege. The goods sold in this section of the market consist chiefly of butter, eggs, poultry, etc. The other portion of the premises is occupied by those within easy access who make it a practice to drive in with produce, which they sell from their wagons. The year 1913 was the best numerically in the history of the market, but no statistics are available as to the amount of business done.

#### MANITOBA.

*Brandon* (February 10, 1914).—In Brandon there is one market, consisting of one building 135 x 75 feet and an open area in the rear 100 x 120 feet. The market is located 2,500 feet from the Canadian Pacific Railway depot, 3,000 feet from the Great Northern depot and 7,500 feet from the Canadian Northern depot, while the street railway runs past the building. The market is used for commodities both by producers and traders in about equal proportions. The extent of business done is about \$5,500 monthly.

*Winnipeg* (February 16, 1914).—There are five public markets in Winnipeg under the jurisdiction of the city, four of these being used mostly by farmers for the sale of hay, straw, wood, etc. The area of these four markets is as follows, respectively: Ward 1, 25,437 square feet; Ward 4, 30,330 square feet; Ward 5, 20,890 square feet; Ward 7, 25,440 square feet. There are no buildings on these four markets other than the weighmaster's buildings, containing weigh scales and office accommodation. They are located about one mile from a railway station and are very conveniently situated in regard to street cars. The Central market, the fifth, is situated at the rear of the city hall, being 31,383 square feet in extent. The size of the building thereon is 60 by 162 feet and it contains 18 stalls, which are rented by the city to retail butchers and produce merchants. Farmers and market gardeners can also sell, wholesale or retail, their produce at the curb of the sidewalk surrounding the market. No vegetables are sold outside the market building during the winter season but frozen meat and fish are sold thereon. No statistics are available as to the amount of business done.

#### ALBERTA.

*Calgary* (February 19, 1914).—Calgary has two retail markets, viz., the hay and grain market and the public market. The area of the hay and grain market is approximately  $1\frac{1}{2}$  acres. The inside dimensions of the market building are 70 by 225 feet. The public market, which has only been in operation about one year, is located on the corner of Third avenue and Fourth street east, about equal distance between the new Grand Trunk Railway station and the Canadian Pacific Railway station (about six blocks from each). This market is used jointly by dealers and producers; at the present time about 65 per cent of the business being handled by the dealers.

*Edmonton* (April 21, 1914).—There are three markets in Edmonton, as follows: Rice Street market, covering an area of about three acres; First Street market, covering an area of about three acres; South Side General Produce market, covering an area of one acre. These markets are all centrally located and are close to the railway stations and the street railway—one has direct street car service, the other two being within two minutes of the street cars. The Rice Street market is the principal one and is used extensively by farmers, producers and others. The bulk of the produce is sold through commission men, who have consignments shipped to them from the agricultural towns of the district. The producer is charged a toll of ten cents per day while the trader is charged one dollar per day. Practically all local producers make use of the market. There are no permanent buildings yet connected with these markets but there is under construction a large market building which will cost in the neighbourhood of \$50,000. The front portion of this building, with full basement, will be three stories high, 64 feet wide and 34 feet deep, with a one-storey attachment with full basement which will be 48 feet wide by 104 feet long. This building is located on the First Street market, is served by the street railway and is within a quarter of a mile of a railway station. It is estimated that fully \$20,000 per week is turned over on these markets.

#### SASKATCHEWAN.

*Regina* (February 2, 1914).—Regina possesses one market, the land area of which consists of a quarter of a block, the market building being approximately 200 x 60 feet. The market is situated some four blocks from and on the same avenue as the post office, the street cars stopping at the corner on which the market is located. Ample accommodation has been provided for stalls, tables, etc., for the sale of commodities of producers and traders. Weigh scales have also been installed for the weighing of coal, firewood, hay and straw. No statistics are available as to the amount of business done on this market.

*Saskatoon* (February 5, 1914).—For the past three or four years a market has been in operation in Saskatoon, but with very little attendant benefit to either the producer or consumer. It is with the object of having the market put on a better basis that at present an investigation is being held by a special committee of the council which is going thoroughly into all matters affecting the marketing of farm produce in Saskatoon. The market building is situated on a site of an area of about two acres. The location is close to the centre of population and is on the street railway, being distant from the Canadian Pacific railway station about three blocks.

#### BRITISH COLUMBIA.

*New Westminster* (February 9, 1914).—In the city of New Westminster there is one market, situated on the water front on the banks of the Fraser river and almost in the centre of the town. The main building is 80 feet wide by 360 feet long, with a wharf 15 feet wide the full length of the building on one side. The market is situated about four blocks from the transportation depots of the Canadian Pacific, the Great Northern, the B. C. Electric, Interurban and the Canadian Northern railways, although their lines pass alongside. There is in connection with the market free stabling accommodation for the *bona fide* farmer; the building used for this purpose being 40 x 200 feet, divided into stalls for horses and cattle; and this together with the driving and stock yards occupies in the neighbourhood of an acre of ground. The street railway line is about 150 feet from the market. The market is used exclusively for the sale of agricultural commodities by the producer direct to the

consumer. The market charges are purely nominal and are figured out simply to carry the cost of maintenance. The estimated amount of the business transacted on the market during 1913 is \$250,000.

*Vancouver* (February 6, 1914).—There is one market in the city of Vancouver, the area of the land being 400 feet by 420 feet, and the size of the building 180 feet by 150 feet. The market is located on Main street, three-quarters of a mile from railway station, while the street railway passes the market. The market is used for the sale of all products of the farm. Producers consign their produce to the market manager, and the produce is sold by him on a ten per cent commission direct to the consumer. Ten stalls are rented to traders. As to the extent of business done, commissions for 1913 on produce sold for farmers amounted to \$6,994.02, rents of stalls to dealers to \$741.65; the number of packages sold by the market manager being 50,647 of a net value of \$66,706.26.

*Victoria* (February 4, 1914).—There is no public market in Victoria at the present time. However, there is a private market, recently established for the sale of the usual commodities, principally foodstuffs, such as butter, eggs, meat, bacon, etc. No statistics are available as to the amount of business done on this private market.



## APPENDIX No. 29.

REPORT BY MR. R. H. COATS, EDITOR OF *THE LABOUR GAZETTE*.

OTTAWA, March 13, 1914.

*Memorandum for Mr. McDougald, Chairman of the Cost of Living Commission.  
Re Cattle Loaning Companies.*

Following your suggestion, I paid a visit while in Minneapolis to the South St. Paul stock yards for the purpose of obtaining further information as to the operations of cattle loaning associations. Mr. Briggs, whose name had been suggested by Mr. Sanford Evans, was out of the city, but I spent some time with Mr. Flanagan, who is closely associated with Mr. Briggs, both being officers of the "Stock Yards National Bank of South St. Paul," which does a large cattle loaning business, and also of the "St. Paul Cattle Loan Company," whose business, as its name implies, is confined to lending money on cattle as security.

While in St. Paul, I learned that the Swift Company in the previous year had sent their solicitor and Mr. Briggs to Toronto for the purpose of interviewing the managers of the leading Canadian banks and securing their help in the establishment of cattle loaning companies in Western Canada. The Swift Company are keenly interested in this form of enterprise, as they believe it to be the best means of encouraging the raising of stock by farmers. Mr. Flanagan gave me a letter to Mr. Carton, treasurer of the Swift Company, whom I duly called upon in Chicago, and who in turn gave me a letter to the firm's solicitor, with full instruction to the latter to supply all information at his disposal.

The method of the cattle loaning company is as follows: A farmer applies for a loan to enable him to purchase stockers and feeders. The company looks into his affairs—including his business reputation, general financial standing, buildings, fodder supplies, etc. If these are found satisfactory, sufficient money is advanced to enable him to purchase cattle—not exceeding the number which, in the company's opinion, he is best able to handle. The company secures itself by a chattel mortgage on the cattle, which are branded and handed over to the farmer, the mortgage being registered in the county registry office. As a rule, loans are not made on cattle on the range, but only on farms. The security is considered excellent, even to the full value of the cattle at the time of purchase, seeing that the animals improve rapidly in value from that moment, and are not as a rule subject to epidemic disease. High rates of interest are therefore possible.

The loaning company having made its loan, disposes of the paper either directly through a bank or through a bill broker. I found that the American banks regard this paper very favourably. I met several independent bankers who assured me of this, notably Mr. Van Wechten, who is vice-president of the Continental and Commercial National Bank of Chicago, the second largest bank in the United States. Minnesota cattle paper is traded in at points as far away as New York, and is as universally sought as "gilt-edge." The reason is that the paper represents the judgment of specialists, the loaning companies having a staff of cattle experts who examine the cattle, appraise their value, visit the farms, etc. On account of the need for this expert knowledge, only a comparatively few of the banks themselves



engage directly in cattle loaning. The "Stock Yards National Bank of South St. Paul" above mentioned, is an instance to the contrary, the location of the bank and the nature of its general business qualifying it to safely engage in cattle loaning.

I found both the banks and the packing companies of St. Paul and Chicago very critical of the lack of facilities under our law for carrying on a similar business in Canada. Every one I saw attributed to this machinery the rapidity with which the farmers of the American Northwest have been able to turn to mixed farming. I do not think the Swifts have any other interest in the matter except that as packers they are anxious to maintain production, and are alarmed at the present outlook in the Canadian West.

The Canadian Bank Act does not allow the banks to lend money on a chattel mortgage except in the case of standing timber, and threshed grain and ships (Statutes 1913, chapter 9, section 76, subsection 2 and sections 84, 85, and 88). They may take a lien on goods in warehouses, but this does not apply to goods in the hands of the producer. Accordingly, our banks are estopped from loaning to farmers on cattle as security either directly or indirectly. It may further be pointed out that they are not engaged in the practice common among banks of the United States of dealing in miscellaneous paper.

Mr. Carton, the solicitor of the Swift Company, stated that he saw no way out of the difficulty except by an amendment of the Bank Act which would place cattle in the same category as standing timber and ships. A letter from him suggesting such amendment is appended hereto. A second letter of Mr. Carton of a more general nature is also appended. Mr. Carton's amendment would not apply to Quebec, where, under the Civil Code, chattels cannot be mortgaged. On this whole question, see Proceedings and Evidence before Banking Committee on the Bank Act of 1913, especially evidence of Mr. Fargon.

I might add that while in Toronto I called on Mr. Richardson, general manager of the Bank of Nova Scotia, which was one of the banks interviewed by Mr. Carton in 1912. Mr. Richardson is interested in the matter, but is not sanguine as to the feasibility of an amendment to the Bank Act. He stated that if a cattle loaning company were started in the West, the Bank of Nova Scotia would be glad to have its business. Such a company, however, would not obtain from the bank the same degree of support that similar concerns obtain in the United States. The St. Paul Cattle Loan Company, for instance, with a capital of \$100,000 and a reserve of \$100,000, issues loans exceeding \$1,500,000. They are able to do this by the ready acceptance of their paper by the banks. Such would not be possible in Canada. Yet the business is universally admitted to be perfectly sound, so much so that Mr. Van Wechten, whose experience as a country and city banker extends over twenty-five years, told me that in all that time, in handling millions of dollars worth of cattle paper from all over the country, he had never lost a single dollar.

I enclose sample copy of forms used by the St. Paul Cattle Loan Company and the Stock Yards National Bank of St. Paul in making loans in the states of Minnesota, North Dakota, and Montana.

## ADDENDUM I.

## FORMS USED BY CATTLE LOAN COMPANIES.

\$..... South St. Paul, Minn.....19....  
 .....after date (without grace) we jointly and  
 severally promise to pay to.....or order  
 .....Dollars  
 for Value received at THE STOCK YARDS NATIONAL BANK, SOUTH ST.  
 PAUL, MINN. with interest at the rate of.....per cent per annum from.....  
 until paid P.O.....  
 No.....Due.....

The endorsers hereof hereby severally waive presentment, demand, protest, and notice of non-payment of, and each hereby agrees that any holder may extend the time of payment for any or all the makers or endorsers hereof.

ST. PAUL CATTLE LOAN CO.

LIVE STOCK EXCHANGE BUILDING,

SOUTH ST. PAUL, MINN. ....

Register of Deeds.....County.  
 .....  
 .....

Dear Sir: We are desirous of receiving an abstract of all chattel mortgages filed on record in your office against.....  
 which have not been released.

The form given below will divulge the information sought.

Will you kindly fill out the same, returning this sheet at the earliest possible moment. If no mortgages are now in force against the party in question, please write "NONE" below. Assuring you that your prompt attention will be greatly appreciated, and that we will remit your fee for trouble upon advice of amount, I am,

Respectfully,

W. E. BRIGGS,

Secretary.

Mortgage Dated.	When Filed.	When Due.	Amount.	To Whom Given.	Description of Property Covered.	Location of Property.

Remarks:.....  
 .....

No other than above listed this ..... day of ..... 191 ....  
 (SEAL) Signed.....  
 .....

N.B.—We would appreciate and hold in confidence any information given under "Remarks," in what would be of interest or value in assisting us to ascertain his reputation both morally and financially.

This Mortgage, made the.....day of.....in the year 191.,  
by.....  
of the County of ..... State of Montana, and whose post office address is  
..... Montana, to the St. Paul Cattle Loan  
Company, of South St. Paul, Minnesota, a corporation.

Witnesseth: That the said.....  
hereby mortgages to the said St. Paul Cattle Loan Company the following described  
personal property, to-wit: .....

It being the intention of the mortgagor herein to hereby mortgage and convey unto the mortgagee herein, all of ..... by h.... owned, of every kind, nature, sex and brand, and the foregoing description shall be construed as describing all of said livestock even though the numbers thereof be greater than herein set forth, with the same force and effect as if each of said animals were herein specifically set forth and described, together with the wool growing or to be grown upon said described sheep, during the life of this mortgage.

Also all property of like kind, hereafter and during the life of this mortgage, acquired by the said mortgagor, by either increase, purchase, or by exchange or substitution for property herein described. The property specifically described above is now in the possession of the mortgagor.....in the County of.....and State of Montana, and at the following described location:

This mortgage is given as security to the St. Paul Cattle Loan Company, or its assigns, for the payment of ..... Dollars according to the terms of.....promissory note....bearing even date herewith, payable to the order of the mortgagee, and described as follows:

One note for.....Dollars, payable.....after date.  
 One note for.....Dollars, payable.....after date.  
 One note for.....Dollars, payable.....after date.  
 One note for.....Dollars, payable.....after date.  
 the said note....bear interest from date at the rate of.....per cent per annum  
 until paid. The makers and endorsers and guarantors agree to pay a reasonable  
 attorney fee if the note.....not paid at maturity and if placed in the hands of  
 an attorney for collection.

Said mortgage is also given as security for such further and additional sums of money as may hereafter, from time to time, and during the life of this instrument, be advanced and loaned by said mortgagee to said mortgagor. . . ., or which may be paid out by the mortgagee to preserve or protect the lien of this mortgage or the property described herein, together with interest thereon at the rate of . . . . . per cent per annum, which said future advances or payments when made are to be evidenced by

notes executed and delivered by the said mortgagor... to the said mortgagee; and are to be as fully secured hereby as though the same were specifically described and set forth herein.

And this mortgage shall be void if such payment be made.

But in case default be made in the payment of the principle or interest as provided in said promissory note....., then the said mortgagee, its agent, attorney, successors or assigns are, or the Sheriff of any County in which the above described property or any part thereof may be, is hereby empowered and authorized to sell the said goods and chattels, with all and every of the appurtenances, or any part thereof in the manner prescribed by law; and out of the money arising from such sale to retain the principal and interest, together with the costs of taking and caring for said property and the costs and charges of making such sale and reasonable attorney's fees, and the overplus, if any there be, shall be paid by the party making such sale, on demand, to the said mortgagor.....heirs or assigns. In case the said power of sale be executed by a Sheriff as above authorized, then such sale shall be advertised by such Sheriff, by posting notices in three public places in said County at least five days prior to such sale, and such sale may be either public or private.

It is further provided, That the said mortgagor....., heirs or assigns, shall have the right to remain in possession of the above described property until default be made herein by the said mortgagor(s), but the said mortgagor.....shall not have the right to sell or otherwise dispose of the same without the written consent of the mortgagee; provided expressly, however, that if default be made in the payment of the principal or interest, as provided in said promissory note....., or if prior to the maturity of said indebtedness, said described property, or any part thereof, shall be attached, seized or levied upon by or at the instance of any creditor or creditors of the said mortgagor... or be claimed by any other person or persons, or if the said mortgagor... shall place or suffer any other person or persons to procure a lien thereon, or if said mortgagor... or any other person or persons shall remove, or attempt to remove, said property, or any part thereof, from the said County of.....State of Montana, or shall conceal, make away with, sell, or in any manner dispose of said described property, or any part thereof, or shall attempt to do so without the written consent of the mortgagee, or if the said mortgagee shall at any time consider the possession of said property, or any part thereof, essential to the security of the payment of said promissory note., then and in such event, or in either of such events, the said mortgagee, its agent or attorney, successors or assigns, or such Sheriff, shall have the right to the immediate possession of said described property and the whole or any part thereof, and shall have the right at its option to take and recover such possession from any person or persons having or claiming the same, with or without suit or process, and for that purpose may enter upon any premises where said property, or any part thereof, may be found, and may at its option, regard the debt secured by this mortgage due and payable and may thereon proceed to sell such property as above provided, and apply the proceeds of sale to the satisfaction of said debt as above provided. The exhibition of this mortgage, or a copy thereof, shall be sufficient proof that any person claiming to act for the mortgagee is duly made, constituted and appointed agent or attorney, as the case may be, to do whatsoever is herein authorized to be done by or on behalf of the mortgagee, its agent, attorney, successors or assigns.

It is further agreed that the lien of this mortgage shall extend to the proceeds derived from the sale of the mortgaged chattels or to any property substituted or exchanged for said chattels, and that in the event of a sale thereof by the mortgagor... or by the mortgagee under the provisions of this paragraph, the purchaser thereof is authorized to pay to the mortgagee the purchase price, and the presentation of this mortgage, or a true copy thereof, will be sufficient evidence of the authority of the said mortgagee to receive the same, and that until such property is so sold and disposed of by said mortgagor... or mortgagee or their respective assigns, the lien of this mortgage upon said property, wherever the same may be, shall continue and remain in full force



and effect, it being understood that any moneys received by said mortgagee, or its assigns, upon the sale of said property, less the amounts secured by these presents, shall be returned to the said mortgagor....., heirs or assigns.

The mortgagor(s) hereby declare(s) and represent(s) to the mortgagee that the mortgagor(s) own(s) said property, and possess...lawful right and authority to sell, mortgage and dispose of the same, and that the same is free and clear of all liens and incumbrances, and the loan secured by this mortgage is obtained by virtue of these representations

IN WITNESS WHEREOF, the said mortgagor...hereunto affix.....signature and seal, the day and year in this instrument first above written.

.....(SEAL)

.....(SEAL)

.....(SEAL)

STATE OF MONTANA,

County of.....} ss

On this.....day of.....in the year 191...., before me, ....., a Notary Public for the State of Montana, personally appeared ....., known to me to be the same person...whose name.....subscribed to the within instrument, and acknowledged to me that...he.....executed the same.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my official seal the day and year in this certificate first above written.

.....  
Notary Public for the State of Montana;

My commission expires.....191.. Residing at.....Montana.

STATE OF MONTANA

County of.....} ss

.....the mortgagor...in the foregoing mortgage of personal property, being severally sworn, say....: That the said mortgage is made in good faith, to secure the amount named therein, and without any design to hinder, delay or defraud creditors.

Subscribed and sworn to before me this.....day of.....191..

.....  
Notary Public for the State of Montana

My commission expires.....191.. Residing at.....Montana.

STATE OF MINNESOTA,

County of.....} ss

.....being first duly sworn deposes and says: That he is an officer and managing agent of the ST. PAUL CATTLE LOAN COMPANY, the corporation named in the foregoing mortgage as mortgagee, and makes this affidavit for and on behalf of said corporation. That the said mortgage is made in good faith to secure the amount named therein, and without any design to hinder, delay or defraud creditors.

Subscribed and sworn to before me this.....day of.....191..

.....  
Notary Public for the State of Minnesota;

My commission expires.....191.. Residing at South St. Paul, Minnesota.



## CHATTEL MORTGAGE.

To

SAINT PAUL CATTLE LOAN CO.

STATE OF MONTANA.

SS

County of.....

Filed on the.....

day of..... A. D. 191..

at ..... o'clock ..... M

County Recorder.

By .....

Deputy Recorder.

## CHattel Mortgage.

KNOW ALL MEN BY THESE PRESENTS: That.....  
of.....in the County of.....  
and State of North Dakota party of the first part, in consideration of the sum of  
..... Dollars in hand paid by .....  
party of the second part, the receipt whereof is hereby acknowledged, does hereby  
grant, bargain, sell, mortgage and convey unto the said party of the second part, its  
successors and assigns, the following described personal property, to-wit:

and also all the natural increase thereof, and substitutes therefor, (no substitutes, however, shall be made without the consent of the mortgagee thereto in writing previously had and obtained) which now are or hereafter, until the indebtedness hereinafter mentioned shall be fully paid, may be on and about the premises herein described.

The above described live stock is all of the kind now owned by the party of the first part, whether in excess of above numbers or not, and is in his possession on

Section No.....in Township No.....Range No.....in the town of.....  
County of..... in the State of North Dakota.

To HAVE AND TO HOLD all and singular the said live stock, personal property and chattels unto the said mortgagee, party of the second part herein, its successors and assigns forever.

And the said first party hereby covenants to and with the said second party, its successors and assigns, that.....he.....now the lawful owner and in possession of said live stock and chattels and has full power to mortgage and convey the same and that they are free from all encumbrances, and said first party will warrant and defend the title to the same against all persons whomsoever.

Provided, nevertheless, that if the said mortgagor, party of the first part shall well and truly pay unto the said mortgagee, party of the second part, its successors or assigns, at the place designated in the notes secured hereby, the sum of..... Dollars, payable as follows: \$.....on the.....day of .....191., \$.....on the.....day of .....191., with interest on each of said sums at the rate of .....per cent per annum from.....until paid, which amounts are evidenced by .....notes of even date herewith, executed and delivered with this instrument, by the said mortgagor, payable to the order of said mortgagee, then these presents and everything herein contained shall be void, otherwise to remain in full force and effect.

It is mutually agreed that this mortgage and the lien thereof shall cover and secure said indebtedness until fully paid, and all extensions and renewals of the note or notes above described.

And the said party of the first part hereby covenants and agrees that in case default shall be made in the payment of any of the notes aforesaid, when they shall be due, or if the mortgagee herein, its successors or assigns, shall at any time in good faith deem themselves insecure, or in case the said mortgagor shall remove or attempt to remove from the said premises, or dispose of, or attempt to dispose of, the said property, or any part thereof, or reasonable and proper care be not taken thereof, or if any of the statements made herein by the said mortgagor shall prove false, in whole or in part, or if the said mortgagor shall fail to keep and perform any of the covenants or agreements herein contained then, and in either of such cases, all of said notes and said sums of money aforesaid, both principal and interest, shall, at the option of the said mortgagee, its successors or assigns, without notice of said option to any one, become at once due and payable, and the said mortgagee, its successors or assigns, officers, agents or attorneys, or any of them, shall thereupon have the right to take immediate possession of said property, and for that purpose to enter upon the premises of said mortgagor or any other place or places where said property or any of the same may be, and remove and sell the same at public auction in the manner provided by law, and at such sale the said mortgagee may become the purchaser, or at private sale, with or without notice, for cash or on credit, as the said mortgagee, its successors or assigns, may elect, and out of the moneys arising from such sale to retain all costs, charges and expenses for taking, removing, keeping, feeding and caring for said livestock and personal property, including \$50 attorney's fees, rendering to said first party the surplus money, if any. And the said party of the first part hereby authorizes the person conducting said sale to give bill of sale to the purchaser thereof, which shall be conclusive as to the regularity of all the proceedings connected herewith, and convey absolutely all the right and title of the said first party in and to said property, if any so sold, and if from any causes the proceeds of the sale of said property shall be insufficient to satisfy and pay said indebtedness, interest, costs, charges and attorney's fees, the said first party hereby covenants and agrees to pay any deficiency there may be.

And the party of the first part hereby further covenants and agrees with the said party of the second part, that this mortgage is intended and shall stand as and for the

security of the party of the second part so long as it may be in any manner interested in the payment of any part of the notes and indebtedness above described, whether as payee, endorser, guarantor or otherwise, as well as for the security of any assignee or endorsee of said notes, and in the absence of an express agreement between the said party of the second part and any such assignee or transferee of said indebtedness or notes to the contrary, the said party of the second part, whether its liability as such endorser or guarantor shall have become fixed and absolute or not, and whether it has responded and paid upon such liability or not, shall have the same right to enforce the covenants and conditions of this mortgage and to exercise the power of sale contained in it after the assignment and transfer of such indebtedness, as it would have had if no such assignment or transfer had been made, but such assignee or endorsee shall also have and be vested with the same right.

IN WITNESS WHEREOF, the part of the first part ha hereunto set. . . . .hand and seal this . . . . . day of . . . . . 191...

In presence of  
..... [Seal]

County of. . . . .

On this ..... day of ..... A.D. 191.., before me, a notary public, in and for said County, personally appeared. . . . ., known to me to be the person described in and who executed the within instrument and acknowledged the same to be ..... free act and deed, and being duly and severally sworn by me did severally depose and say that each and all of the matters, facts and things set forth in said instrument are true.

.....  
*Notary Public.*

This is to certify that the party of the second part, named in the within instrument, has surrendered to me, the party of the first part named therein, at the time of the execution thereof, a correct copy of said original signed instrument with the signatures of the witnesses and the certificate of acknowledgment thereto shown thereon.

In presence of  
.....  
.....

No. . . . .  
CHATTEL MORTGAGE.

.....  
TO  
.....

OFFICE OF REGISTER OF DEEDS.

State of North Dakota }  
County of. . . . . } ss.

I herby certify that the within instrument was filed in this office on the. . . . . day of. . . . . 191.. at. . . . . o'clock . . . . . m., and was duly entered in Chattel Mortgage Book.

By. . . . .  
..... *Register of Deeds.*  
..... *Deputy.*

## OFFICE OF REGISTER OF DEEDS.

State of North Dakota

County of. . . . . } ss.

I hereby certify that I have carefully compared the within instrument with the original instrument No. . . . . now on file in my office and that it is a full, true and correct copy of the same, and that the above is a true copy of the filing endorsed thereon.

Dated. . . . . 191..

Register of Deeds.

By. . . . . Deputy.

## CHATTEL MORTGAGE.

Leader Blank Department, Long Prairie, Minn.

This Indenture, made this . . . . day of . . . . . A.D. 191.. between . . . . . of the town of . . . . . County of . . . . . and State of Minnesota, party of the first part, and

STOCK YARDS NATIONAL BANK of South St. Paul, Minnesota, party of the second part:

Witnesseth, That the said party of the first part, in consideration of the sum of . . . . . Dollars, paid by the said party of the second part, and to secure the payment of the sum of money hereinafter mentioned, does hereby grant, sell and convey to the said party of the second part, the goods, chattels, and property hereinafter described, viz.:

. . . . .  
 . . . . .  
 . . . . .  
 . . . . .  
 now in possession of the said . . . . .  
 in the town of . . . . . in . . . . . county, Minnesota, to have and to hold, all and singular, the aforesaid Goods, chattels and Property, with the appurtenances, and all the estate, right, title and interest of the said party of the first part therein, unto the said party of the second part, and its assigns, forever.

And the said party of the first part for himself, his heirs, executors and administrators, does covenant and agree to and with the said party of the second part, and its assigns that he is lawfully possessed of the said goods and chattels as of his own property; that he has good right to sell and convey the same in a manner aforesaid; that the same are free from all encumbrances, and that all and singular goods, chattels and property above bargained and sold, in quiet and peaceable possession of the said party of the second part, and its assigns, he shall and will Forever Warrant and Defend:

Provided, That if the said party of the first part shall well and truly pay, or cause to be paid, unto the party of second part or its assigns, the sum of \$. . . . . according to the conditions of . . . . . certain promissory note as follows:

One note for \$. . . . . due . . . . .	One Note for \$ . . . . . due . . . . .
One note for \$. . . . . due . . . . .	One Note for \$ . . . . . due . . . . .
One note for \$. . . . . due . . . . .	One Note for \$ . . . . . due . . . . .

bearing even date herewith, executed by the said .....  
 ..... payable to

STOCK YARDS NATIONAL BANK of South St. Paul, Minnesota,  
 with interest at ..... per cent per annum ..... till paid, then  
 these presents to be void.

But if default shall be made in the payment of said sum or sums of money, or the interest thereon, at the time the said note or notes shall become due, or if any attempt shall be made by the said mortgagor, or any other person, to dispose of or injure said property; or to remove said property, or any part thereof, from said county, or if said mortgagor does not take proper care of said property or if said mortgagee shall at any time deem itself insecure, or in default of any of the covenants or conditions herein contained, then, thereupon and thereafter, it shall be lawful, and the said mortgagor hereby authorizes said mortgagee, or its assigns, or its authorized agent, to take said property, wherever the same may be found, and hold or sell and dispose of the same and all equity of redemption, at public auction, on such terms as said mortgagee or its agent may see fit, retaining such amount as shall pay the aforesaid note or notes and interest thereon, and an attorney's fee of ten dollars, and such other expenses as may have been incurred, returning the surplus money if any there may be, to the said mortgagor or his assigns, and the said mortgagor hereby waives demand and personal notice of the time and place of sale. And as long as the conditions of this mortgage are fulfilled, the said mortgagor to remain in peaceful possession of said property, and in consideration thereof, he agrees to keep said property in as good condition as it now is, at his own cost and expense.

In Testimony Whereof, the said party of the first part hereunto sets his hand and seal the day and year first above written.

Signed, Sealed and Delivered in presence of

..... } ..... (Seal)  
 ..... } ..... (Seal)

State of Minnesota, }  
 } ss  
 County of ..... }

Be it Known, That on this ..... day of .....,  
 191...., personally came before me .....  
 ..... to me personally known to be the same person  
 described in, and who executed the foregoing instrument,  
 and acknowledged that he executed the same freely and  
 voluntarily.

.....

Notary Public Minnesota.

My Commission expires .....



No. .... Mortgage No. ....

## CHATTEL MORTGAGE.

To

STOCK YARDS NATIONAL BANK, South St. Paul, Minn.

Office of Register of Deeds, State of Minnesota.

County of ..... {  
..... } ss

I hereby certify that the within Mortgage was filed in this office for record on the ..... day of ....., A.D. 191... at ..... o'clock .A.M., and was duly entered in Chattel Mortgage book ..... page .....

Register of Deeds.

Office of Register of Deeds, State of Minnesota.

County of ..... {  
..... } ss

I hereby certify that I have compared the within instrument with the original Mortgage No. .... now on file in my office and that it is a true and correct copy of the same and of the whole thereof, and that the above is a true copy of the filing thereon.

Dated ....., 191...

Register of Deeds.

## CONFIDENTIAL.

STOCKYARDS NATIONAL BANK,

South St. Paul, Minn.

Gentlemen,—As a basis for a loan or for credit which ..... may now or hereafter ask of your Bank ..... make the following statement of ..... present financial condition and responsibility.

Name of firm, corporation or individual .....  
 Town.....County.....Date.....

*General Statement.*

ASSETS.		Dollars.	Cts.	LIABILITIES.		Dollars.	Cts.
Personal Property.....				Chattel mortgages—upon what property given—when due.			
				Borrowed money,			
				When due.....			
				Rate of interest.....			
				Security.....			
Real Estate, title to which is in,							
Acres,				Are you surety on notes or bonds?			
Cash value				Confidential and other debts not included in above.....			
Less encumbrance, if any.....				Total liabilities.....			
Total assets.....				Total assets.....			

Remarks .....

The above statement, both printed and written, has been carefully read by .... and is a full, true and correct statement of ..... financial condition.

Witness: Signed .....

.....

Subscribed and sworn to before me this ..... day of ....., 191..

My Commission expires ....., 191..

Notary Public in and  
 for ..... County .....

## CHATTEL MORTGAGE.

KNOW ALL MEN BY THESE PRESENTS: That.....  
 of.....in the County of.....and State of South Dakota party  
 of the first part, in consideration of the sum of.....  
 .....Dollars in hand paid by.....  
 party of the second part, the receipt whereof is hereby acknowledged, does hereby  
 grant, bargain, sell, mortgage and convey unto the said party of the second part, its  
 successors and assigns, the following described personal property, to wit:

.....  
 .....  
 .....  
 and also all the natural increase thereof, and substitutes therefor (no substitutes  
 however shall be made without the consent of the mortgagee, thereto in writing previously  
 had and obtained) which now are or hereafter until the indebtedness hereinafter  
 mentioned shall be fully paid, may be on and about the premises herein described.

The above described live stock is all of the kind now owned by the party of the  
 first part, whether in excess of above numbers or not, and is, in his possession on  
 Section No.....in Township No..... Range No..... in the town of.....  
 County of.....in the State of South Dakota.

To HAVE AND TO HOLD all and singular the said live stock, personal property and  
 chattels under the said mortgage, party of the second part herein its successors and  
 assigns forever.

And the said party hereby covenants to and with the said second party, its  
 successors and assigns, that...he.....now the lawful owner and in possession  
 of said live stock and chattels and has full power to mortgage and convey the same  
 and that they are free from all encumbrances, and said first party will warrant and  
 defend the title to the same against all persons whomsoever.

Provided, nevertheless that if the said mortgagor, party of the first part shall  
 well and truly pay unto the said mortgagee, party of the second part its successors or  
 assigns, at the place designated in the notes secured hereby, the sum of.....  
 .....Dollars, payable as follows:

\$.....on the.....day of.....191...\$......on  
 the.....day of.....191...with interest on each of said sums at the rate  
 of.....per cent per annum from.....until paid, which amounts are  
 evidenced by.....notes of even date herewith, executed and delivered with this  
 instrument, by the said mortgagor, payable to the order of the said mortgagee, then  
 these presents and everything herein contained shall be void, otherwise to remain in  
 full force and effect.

It is mutually agreed that this mortgage and the lien thereof shall cover and  
 secure said indebtedness until fully paid, and all extensions and renewals of the note  
 or notes above described.

And the said party of the first part hereby covenants and agrees that in case  
 default shall be made in the payment of any of the notes aforesaid, when they shall  
 be due, or if the mortgagee herein, its successors or assigns shall at any time in good  
 faith deem themselves insecure, or in case the said mortgagor shall remove or attempt  
 to remove, from the said premises or dispose of, or attempt to dispose of, the said  
 property, or any part thereof, or reasonable and proper care be not taken thereof, or if  
 any of the statements made herein by the said mortgagor shall prove false, in whole or  
 in part, or if the said mortgagor shall fail to keep and perform any of the covenants  
 or agreements herein contained then, and in either of such cases, all of said notes  
 and said sums, of money aforesaid, both principal and interest, shall, at the option of  
 said mortgagee, its successors or assigns, without notice of said option to any one,  
 become at once due and payable, and the said mortgagee, its successors, or assigns,  
 officers, agents or attorneys or any of them, shall thereupon have the right to take

immediate possession of said property, and for that purpose to enter upon the premises of said mortgagor, or any other place or places where said property or any of the same may be, and remove and sell the same at public auction in the manner provided by law, and at such sale the said mortgagee may become the purchaser, or at private sale, with or without notice for cash or on credit, as the said mortgagee, its successors or assigns may elect, and out of the moneys arising from such sale to retain all costs, charges and expenses for taking, removing, keeping, feeding and caring for said live stock and personal property, including \$50 attorney's fees, rendering to said first party the surplus money, if any. And the said party of the first part hereby authorizes the person conducting said sale to give bill of sale to the purchaser thereof, which shall be conclusive as to the regularity of all the proceedings connected herewith, and convey absolutely all the right and title of the said first party in and to said property, if any so sold, and if from any causes the proceeds of the sale of said property shall be insufficient to satisfy and pay said indebtedness, interest, costs, charges and attorney's fees, the said first party hereby covenants and agrees to pay any deficiency there may be.

And the party of the first part hereby further covenants and agrees with the said party of the second part, that this mortgage is intended and shall stand as and for the security of the party of the second part so long as it may be in any manner interested in the payment of any part of the notes and indebtedness above described, whether as payee, endorser, guarantor or otherwise, as well as for the security of any assignee or endorsee of said notes, and in the absence of and express agreement between the said party of the second part and any such assignee or transferee of said indebtedness or notes to the contrary, the said party of the second part whether its liability as such endorser or guarantor shall have become fixed and absolute or not, and whether it has responded and paid upon such liability or not, shall have the same right to enforce the covenants and conditions of this mortgage and to exercise the power of sale contained in it after the assignment and transfer of such indebtedness, as it would have had if no such assignment or transfer had been made but such assignee or endorsee shall also have and be vested with the same right.

I hereby acknowledge receipt of a true and correct copy of the within and foregoing mortgage at the time of signing the same, without additional cost to me.

IN WITNESS WHEREOF, the part of the first part ha hereunto set.....hand and seal this.....day of.....191....

In presence of

.....(Seal)  
.....(Seal)

No.....

CHATTEL MORTGAGE.

.....  
.....  
.....  
To

OFFICE OF REGISTER OF DEEDS.

State of South Dakota }  
County of..... } ss

I hereby certify that the within instrument was filed in this office on the..... day of.....191....at.....o'clock....M., and was duly entered in Chattel Mortgage Book.....

Register of Deeds.  
By.....Deputy.

## OFFICE OF REGISTER OF DEEDS.

State of South Dakota }  
 County of..... } ss

I hereby certify that I have carefully compared the within instrument with the original instrument No.....now on file in my office and that it is a full, true and correct copy of the same, and that the above is a true copy of the filing endorsed thereon.

Date ..... 191 .....

Register of Deeds.

By.....Deputy.

## ADDENDUM II.

## LETTER FROM MR. CARTON WITH ENCLOSURES.

Gardner, Carton and Thomson  
 Attorneys and Counsellors,

CHICAGO, March 6, 1914.

R. H. COATS, Esq.,  
 Department of Labour,  
 Ottawa, Canada.

DEAR SIR,—Referring again to our talk yesterday, I enclose herewith, with Mr. L. A. Carton's consent, copy of a letter, dated December 11, 1913, to him from Mr. W. P. Dickey, President of the Portland Cattle Loan Company, Portland, Oregon.

It is my understanding that the climate in the western states, where the Portland Cattle Loan Company lends money, is in many respects similar to that of the western Canadian range country, where the chinook winds prevail, dissipating snow and frost during the winter months.

Respectfully yours,

(Sgd.) ALFRED T. CARTON.

## PORTLAND CATTLE LOAN COMPANY.

North Portland, Oregon, December 11, 1913.

Mr. L. A. CARTON,  
 C/o Swift & Company,  
 Union Stock Yards, Chicago, Ill.

DEAR SIR,—Complying with your request of the 1th, we shall be very pleased to furnish you with the information, and trust you will be successful in persuading Canadian banks to become purchasers of Cattle Loan paper.

We answer your questions as follows:

1. We have loaned in volume, in twenty-six months, approximately \$9,000,000, and have retired paper sold to banks approximately \$7,000,000. This should give one an idea of the liquidity of the paper.

2. Our security has been a chattel mortgage on cattle and sheep. In the fall of the year we adhere strictly to loaning on the class of stock going into feed lots. In the spring of the year our loans are always lower, but we make loans to the best and most responsible parties for cattle going on grass, mostly within fence and when on the range insist that riders are with them. It is understood that this class of cattle, in the fall, with



very few exceptions, either come to the market as beef or go into the feed lots. We have never taken security other than chattel mortgage on the live stock; have not asked for real estate security.

3. To assure ourselves that the security is as stated, will say that this is passed on by our inspectors when the loan is made direct and when coming through the country bank (from whom we get a great deal of our paper) the security is inspected by the banker and we have advice from him to the effect that they have the cattle and we can tell from the condition of their financial statement whether they are substantial men.

4. The instrument taken as evidence of the loan are notes secured by chattel mortgage, and out of the vast amount of loans we have made we have only had one fore-closure and that just recently. Of course, our chattel mortgage covers that we could seize or take the property at any time, but we believe it much better to proceed through a Court of Equity in the regular manner as then we could get a deficiency judgment in case there was a loss.

5. The result of my experience with this class of security is that I consider it the safest, most liquid and reliable loan that a banker or an investor could buy if he were in the market for paper that would absolutely turn to cash.

I am also of the opinion that there is a higher regard for cattle paper each year, and it is my prediction before many years that cattle will be fed the year round. I do not see where there is any hazard whatever in loans of this character, providing the lender knows his man well and the borrower has a sufficient amount of feed for fattening purposes.

It is a great mistake to overstock an individual, and we generally consider that a ton of good alfalfa hay will feed an animal in this territory sixty days.

Cattle paper is not known to bankers as well as it might be, and when they find out that this class of security appreciates each day you hold it, owing to the gain made in weight of the live stock, I am certain they would become ready buyers.

I find the territory tributary to our market a most desirable country in which to loan as there is an abundance of feed, plenty of water and no droughts, and the climate is mild in winter.

Trusting that this information will be of some assistance, I am,

Yours very truly,

(Sgd.) W. P. DICKEY,  
*President.*

#### PARTIAL LIST OF STOCKHOLDERS.

Estate G. F. Swift, deceased. . . . .	Chicago
Louis F. Swift, President Swift & Co. . . . .	Chicago
Edward F. Swift, Vice-President Swift & Co. . . . .	Chicago
L. A. Carton, Treasurer Swift & Co. . . . .	Chicago
A. H. Veeder, Attorney. . . . .	Chicago
E. H. Bailey, President First National Bank. . . . .	St. Paul
Geo. H. Prince, Chairman Board Merchants National Bank, St. Paul	
Kenneth Clark, Capitalist. . . . .	St. Paul
J. W. Lusk, Capitalist. . . . .	St. Paul
A. B. Stickney, Capitalist. . . . .	St. Paul
John S. Bangs, Manager Swift & Co. . . . .	South St. Paul
J. J. Flanagan, President Stock Yards National Bank. . . . .	South St. Paul
W. E. Briggs, Cashier Stock Yards National Bank. . . . .	South St. Paul

Kenneth Clark, Prest.  
J. J. Flanagan, Vice Prest.

W. E. Briggs,  
Secy. & Treas

## ST. PAUL CATTLE LOAN CO.

## INCORPORATED

Cash Capital. . . . . \$200,000 00

Surplus. . . . . :

Loans Placed on Live Stock Exclusively.

---

 DIRECTORS

Kenneth Clark, J. W. Lusk, E. H. Bailey, J. J. Flanagan, John S. Bangs, Geo. H. Prince, W. E. Briggs, South St. Paul, Minn.

## APPENDIX No. 30.

## THE PROBLEM OF AGRICULTURAL CREDIT IN CANADA.

Few questions in relation to economic agriculture have attracted so much attention as has the problem of supplying loans and advances to farmers at low rates of interest, and no question apart from the tariff—which is ever with us—is so agitating the minds of the Western Canadian farmer at the present moment.

Ever since, and doubtless even before Louis XIV in one of those pleasing *bons mots* which so distinguished that otherwise amiable monarch, remarked that credit supports agriculture as the cord does the hanged, it has been recognized that credit facilities are of the utmost importance to farmers, even more so perhaps than to other business men. That this is so may very readily be seen on reflecting that a farmer, especially if he be a grain farmer, receives far the greater amount of his money in one lump sum when he sells his product. His greatest outgoings have been immediately before he markets his crop; help has had to be hired and paid in cash; machinery has had to be repaired or replaced; the threshing gang has had to be paid either in cash or by a lien note on the crop, and in many other ways the greatest expense has been incurred immediately before his returns come in. In addition to that, nature makes haste slowly and agriculture is not susceptible to a whirlwind campaign; although the returns from good farming land may be reasonably sure, they are also undoubtedly slow. A farmer is not in the position of a merchant with a large and quick turnover, with money coming in every day over the counter, who can discount a bill of lading and obtain advances from the bank if his credit be good, readily and at reasonable rates. What is more, the banks are prohibited by law from advancing money on mortgage, and can only make loans on personal security, thereby cutting off the farmer's chief asset.

We find the farmer, therefore, in peculiar need of credit facilities, and also peculiarly handicapped in his ability to obtain them.

The question has indeed come before us with redoubled vigour of late owing to the rising tide of feeling, principally in the States and the western provinces of the Dominion, that some form of co-operation might be introduced to benefit the farming community in the matter of obtaining loans at a cheap rate. For some years now there has been a growing feeling in the West that the banks have treated the farmer harshly and unconscionably. Among other charges that have been laid at the door of the banks, to quote the Saskatchewan Commission's report, it is said that they have tried to dominate business policy; have sought to pay dividends first and serve their clients second; that they are controlled outside the province and at times of stress leave the province to its fate; that their charges for transferring funds are unreasonably high, and the rate of interest they charge unnecessarily large; that the interest allowed on deposits is too low, and that, finally, their sympathies lie rather with the commercial than with the agricultural class.

This is indeed a formidable indictment and if proved would show a lamentable absence of public spirit on the part of the banks.<sup>1</sup> So great has been the agitation in the States that in May, 1913, a large commission consisting of two members from every

<sup>1</sup> In this connection the evidence of Sir Edmund Walker before the Committee on Banking and Commerce which investigated the revision of the Bank Act, 1913, should be given due weight. He stated that it was the policy of the Bank of Commerce to go into any new place with the railway, practically along with the first store-keeper. On the average a new branch does not pay its expenses till the third year, and it takes six or seven years at least before it has made enough money to cover the losses of the first three years. Sir Edmund Walker's evidence throughout is a striking defence of the Canadian Chartered Banks.

State in the Union sailed for Europe, charged with the duty of inquiring into the facilities offered in different countries of Europe to the farmers to obtain loans at low rates of interest. Along with them went several representatives from the western provinces, the province of Saskatchewan sending two delegates. In that province the agitation against the banks and loan and mortgage companies has been particularly insistent, thanks largely to the enthusiasm of the Grain Growers' Associations, and the Provincial Government took this opportunity to make an inquiry into the whole subject. With this report and recommendations we will deal later.

*The Saskatchewan Royal Agricultural Credit Commission.*

On the return of the delegates of the province of Saskatchewan from their European tour with the United States Commission, the Government of the province appointed a commission to tour the province and inquire into the actual state of affairs in agricultural districts. Their procedure was to select some county town (they visited fifteen centres in all) and invite any farmers, bankers, loan company agents, or anyone interested in the question to meet them in a more or less informal discussion of the needs of the farmers of the district for better credit facilities; the general state of agriculture in the vicinity; the ease or difficulty with which money could be raised on good security, and the willingness of the farmers to try a co-operative system of raising money on mortgage. The commission possessed the right to subpoena but does not appear to have exercised it. The sittings held were exceedingly interesting and much valuable and significant evidence was collected. Great interest was evinced and farmers would drive in from all the adjacent districts to attend the sessions of the commission.

In analysing the evidence given,<sup>1</sup> the first salient fact to be noted is that over eighty per cent of all the farm lands in the province are mortgaged. It may be noted that those districts in which the farmers did not give a very hopeful account of farming conditions were exactly the districts (as indeed might be expected) where the percentage of mortgaged farms is highest. For instance at Fillmore, a district which seemingly suffers from lack of good water, it was reported that ninety-nine per cent of the farms were mortgaged; in the Scott district one farmer reported that every farm in the district was mortgaged. A notable exception is to be noticed at Prince Albert where only twenty per cent were reported as mortgaged, this latter district appearing to be exceptionally prosperous.

As to the question whether it was difficult to raise money from banks or mortgage companies, the evidence is practically unanimous that it has always been difficult but that this year it has been practically impossible or at the best extremely difficult.

With regard to the prevailing rate of interest in only one single instance, at Wolseley, did evidence show that as low a rate as 7 per cent was charged by a mortgage company for loans. Rates at 9, 10, 12 and 14 were common, and even fifteen per cent was spoken of. There was also some interesting evidence given as to the "preliminary fees" charged before a farmer can obtain a loan from a mortgage company. Here again evidence was unanimous in showing them to be very high, in some cases excessive and extortionate. For instance, one farmer at Yorkton spoke of preliminary fees of \$38 being paid on a loan of \$650, another at Moosejaw of \$25 having to be paid to obtain a loan of \$400.

Perhaps the most interesting evidence of all was given on the question whether farmers would be willing to try some form of co-operative credit, possibly the Landshaft system, among themselves. Out of fifteen districts in which the question was asked, two replied in the negative, five answered in the affirmative without imposing any conditions, four were ready for the experiment if the Government backed it, and three most emphatically qualified their assent to such a scheme by stipulating that no

<sup>1</sup> Cf. daily reports of the *Regina Leader*, Aug. 7-24, 1913, for a verbatim report of each meeting; also Report of the Royal Commission.



Government aid should be given whatever, the fear of party politics entering into the granting of loans being freely expressed. In neither of the two communities where unwillingness was found to try a co-operative scheme, do the farmers speak optimistically of the outlook in agriculture, nor do the districts appear to be very prosperous. It would, therefore, not be an unjust inference to suppose that the desire for co-operation finds its keenest supporters in the very districts where its assistance to struggling farmers would be least needed and the greatest apathy towards it in those localities where presumably its benefits would be most valuable. Comment on this fact is surely needless.

Besides the evidence given by the farmers, the Commission has produced some remarkable figures with regard to the indebtedness of the agricultural community of the province. . . . They estimate that the average indebtedness of the farmers is close on \$1,500, the average farm being one of 295 acres, that is, an average indebtedness of \$5 per acre.<sup>1</sup> Even more grave than this is the statement that during the fifteen months ended August 15th, 1913, there were no fewer than 1,723 sale and mortgage proceedings in the province of Saskatchewan.<sup>2</sup>

This is most undoubtedly a very serious state of affairs, and, whatever may be the cause from which it has arisen, it must be admitted that the western farmer is bearing a heavy burden of debt. To what means of alleviation shall he then turn? On the continent of Europe systems have been founded for helping farmers by co-operation or state assistance, and now, owing largely to the agitation carried on by the Grain Growers' Associations in the Western Provinces of the Dominion and by a group of Democrats from the south led by Senator Duncan U. Fletcher in the United States, great interest has been aroused in the West, more particularly in the province of Saskatchewan, while both political parties in Manitoba have adroitly incorporated the cause of co-operation into their respective platforms. A great many forms of co-operative enterprise and systems of obtaining cheap credit for farmers have been instituted in different countries of the world. All differ as the exigencies of temperament, locality and financial conditions demand, yet a careful study will reveal the fact that all systems, however they may vary in form and detail, may be classed under three principal groups or types:

*First*, the system of raising loans on mortgages procured for the borrower by a society of landowners, who issue their own bonds secured by the land of the borrowers: under this heading we will consider the German *Landschaften*.

*Second*, Societies which found banks for receiving deposits and lending on short time loan to members, instances of this being the Schultz-Delitsch and Raiffeisen in Germany and the Desjardins banks in Quebec: this type will be considered with reference to the last instance.

*Third*, the direct state mortgage loans without any co-operative character at all, as in the Australian system.

#### THE GERMAN *LANDSCHAFTEN*.<sup>3</sup>

The story of the work of the German Land Mortgage Credit Associations, commonly called *Landschaften*, since their founding by Frederick the Great in 1770 is an oft told tale. Designed to help the landowners of Prussia in the financial crisis which followed the Seven Years' War, these Associations at first were compulsorily imposed

<sup>1</sup> Statistics of mortgage indebtedness of farms in U.S.A., show that in the States immediately to the south the percentage of mortgaged farms range from 38 in S. Dakota to 51 in Iowa. The average for seven west north centre States is 45.4 per cent. Thirteenth Census of U. S. A.

<sup>2</sup> This is a startling figure when compared with the evidence from the State of Victoria where, under State Government loans, only 28 farms were sold up in fifteen years.

<sup>3</sup> The report of Mr. J. R. Cahill to the British Board of Agriculture, "An inquiry into Agricultural Credit and Agricultural Co-operation in Germany," issued as a Blue Book (cd. 6626), is by far the most thorough and exhaustive treatment of the subject in English. Mr. Henry Wolff's "People's Banks" is a mine of useful information. There are numerous descriptions of the system in economic literature.



on all the landowners of the districts in which they were formed, although this compulsory character was modified somewhat later.

These institutions are not, in the ordinary sense, co-operative credit associations at all, that is to say in the sense that the Raiffeisen and Schulze-Delitsch systems are co-operative, seeing that they are non-profit seeking, have no share capital and the accumulated assets are utilized not in lending, but in covering any deficit. These associations may therefore be regarded as very highly organized associations of borrowers, with collective guarantee, for obtaining capital from third persons; by issuing bonds secured by mortgages on the properties of all the members they create a security realisable at any time, and far superior therefore to a mere individual mortgage security.<sup>1</sup>

As originally instituted, mortgage bonds were issued secured by mortgage upon specific property with the guarantee of the Associations to back them, but of late years this system has been changed, and now the bonds represent legal claims upon the associations which are founded upon mortgage claims for similar amounts.

The system of working is a simple one. The individual borrower goes to the *Landschaft* officials who, after his land has been appraised,<sup>2</sup> give a bond in exchange for his mortgage; the borrower then sells the bond in the open market. The *Landschaft* pays the interest on its bonds itself, and looks to the borrower to pay a slightly higher rate of interest and amortization to the association direct. If the borrower fail to keep up his payments the *Landschaft* forecloses (having statutory powers to do so without recourse to a lawsuit), has the land sold to the highest bidder and returns to the borrower any balance left over after the debt and costs have been paid.

All the associations are supervised by the state, and rank as public corporations, their officers ranking as semi-state officials.

In order to obtain a wider market for the bonds of the Prussian provincial associations, eight of these in 1873 combined to form the Central Association, retaining, however, the right to issue their own provincial bonds as well. It was thought that by obtaining a wider market outside of Germany if possible, the bonds would be less liable to fluctuations "as bad harvest and other possible evils are usually only local, and their occurrence, while it might affect seriously bonds of provincial associations, would not affect those resting upon a broader basis." But this central association has not met with any striking success and the value of the central association bonds does not stand higher than those of the provincial associations.<sup>3</sup>

The business of an association is carried out under the supervision of (a) the Royal Commissioner (b) a Board of Directors, (c) the Council of Administration, (d) the General Assembly. The Royal Commissioner usually the Governor of the Province is a state official nominated by the Government and is president of the whole association.

The board of directors consists of a director general, other members chosen to represent different districts, and other non-voting legal members called syndics. The latter are permanent paid civil servants who conduct the whole business, arranging the legal formalities, adjusting claims, cancelling mortgages, etc. The other members are property owners within the district, and are unpaid. Besides the central board of directors, local directors are elected for the various divisions of the area of the association. They are members of the valuation revision committee, and are charged with the duty of keeping a watch on the conduct of the mortgages in their vicinity which might in any way impair the value of the property mortgaged.

The Council of Administration is a body designed to stand between the directorate and the general assembly. As the latter does not meet regularly, the Council of Administration is intended to represent the general body of members and to exercise supervision over the directorate. The council meets once a year, and before it is laid a gen-

<sup>1</sup> Cahill, op. cit., 1.

<sup>2</sup> Most of the Associations will lend up to  $\frac{3}{4}$  of the value of the land tax assessment, but a few only up to  $\frac{1}{2}$ , none less. Small holders can, however, get slightly better terms.

<sup>3</sup> Cahill, op. cit., p. 4.

eral report of the year's work by the directorate, the valuations and loans made, the bonds issued, what properties have been compulsorily administered, and the general state of the funds; it also determines the rates at which bonds shall be issued within certain periods. Members are all mortgage debtors to the association of at least \$7,500 each.<sup>1</sup>

The General Assembly is a body composed not of the entire body of members, but consists of the different directors of the various districts, the officers of the association, and certain deputies chosen by all the members; but the personnel of the assembly varies in different associations. In the majority of cases, the general assembly does not meet annually but is called into session by the state commissioner, the council of administration or the directorate. Membership of the *Landschaft* is obtained when any individual becomes a mortgagor of the association and ceases when he has redeemed his mortgage. Some associations charge a small entrance fee, but it is not generally done.

A very small charge (varying from  $\frac{1}{4}$  to 1-12 per cent of the amount of the loan) is usually charged for general administrative purposes. The *Landschaften* have no power to refuse loans to landowners who fulfil all the necessary requirements and whose properties are good for the money, or else the association must show good cause for their refusal. Amortization of loans is not general; and various regulations exist in different associations. In most cases the contributions towards redemption of the mortgage are not applied to the immediate reduction of the debt but are accumulated in a special sinking fund. In some associations, however, borrowers are allowed to withdraw their accumulated contributions or take out fresh mortgages.

Bonds have held a very strong position in the money market, and the majority are quoted at, from under 1 to about 2 per cent lower than Government stock bearing the same rates of interest. Indeed it is interesting to note that in 1808, in Prussia's darkest hour, when the land lay crushed by Napoleon after the disaster of Auerstadt and Jena, while Prussian stock was quoted at 20 the bonds of the Silesian Association never fell below 50.

Mr. Cahill sums up the special merits of the *Landschaften* as follows:—

1. Mobilization of credit.
2. Non-liability to recall of loans.
3. Low rate of interest.
4. No possibility of the rate of interest being raised since the bonds are irredeemable by the holder.
5. Right to reduce the debt at borrower's convenience.
6. Low valuation charges.
7. Administration inexpensive and high qualifications for their work of the office holders.

Many of the *Landschaften* have instituted loan banks in connection with themselves, not only to carry on a general banking business, but also to grant advances to borrowers on the security of the bonds of their associations, and also finally to grant short term non-mortgage loans to members who obtain from them more favourable terms than they can elsewhere. These banks have realized very considerable profits, and after appropriations to reserve have turned over to their respective associations substantial sums which are applied to the reduction of the mortgage indebtedness of members.

Besides their principal activities most of the *Landschaften* have established fire and life assurance societies, and one interesting movement in the East Prussia Association may be noted. Here an independent association has been set up to carry on all kinds of life insurance. Instead of paying to the sinking fund the payments were made into premiums on life insurance policies the value of which are to be devoted to paying

<sup>1</sup> It is impossible to state one figure for all Germany: some of the associations elect members with a minimum indebtedness of \$5,000, actual or potential. Cf. Cahill, op. cit., p. 7.

off the mortgage at the death of the mortgagor, any profits of the subsidiary association being devoted to the benefit of the parent Landschaft for the removal of indebtedness of members.

In considering the feasibility of inaugurating in another land and under very different conditions an organization of a similar character, it would be well to keep the following points very carefully in view:—

*First*, the old established and well developed character both of the associations and of the estates on which they grant their mortgages.

*Second*, they are completely under Government control and their officers are permanent civil servants, specialists in their own line and trained to their duties.

*Third*, the principal of amortization is not at all one of their chief points.

#### THE CAISSES POPULAIRES OF QUEBEC.<sup>1</sup>

It is not in the older countries alone that we find successful efforts to supply cheap money to farmers and others who are willing to co-operate for the purpose of securing the benefits arising from community of interests, efforts and liabilities, but a most interesting and highly successful organization is being carried on in our very midst.

M. Alphonse Desjardins, a public spirited French-Canadian gentleman of Levis, P.Q., founded in December, 1900, a co-operative bank. At that time there was no law providing for such an institution, and until the passing in 1906 of the Quebec Syndicates Act, it remained simply a voluntary association, kept together and managed by its founder. During those six early years only two similar banks were founded. The Quebec Act was designated to regularize the formation of co-operative societies, in the form of production, consumption and credit associations; the territory within which such an association was empowered to operate being the limits of a provincial electoral district. The responsibility of members is limited to the amount of their respective shares, and only persons within the electoral area can become members. All efforts to pass a similar bill to apply to the whole Dominion have failed, in spite of favour from high quarters.

The system has certainly flourished, and at the end of 1913 no less than 141 banks had been established in Canada, of which 122 were in the Province of Quebec, and 19 in Ontario, with 65,700 members. The movement has also spread to the United States and there are 23 such banks in Massachusetts and New Hampshire organized by Mr. Desjardins.

These banks are, of course, comparatively small affairs and yet the volume of business done is a striking one. A conservative estimate of the amount of loans made yearly would be over \$3,560,000; the general turnover has now reached \$8,700,000 per annum, and since the inception of the scheme, 15,000 loans have been made.

The Levis Bank, after an existence of thirteen years had on November 15, 1913, a general turnover of \$1,830,211, with a total asset of \$242,055. It had loaned out during the course of its existence a total sum of \$1,197,049 in 6,200 loans, without one single cent of loss, nor has any other of the banks lost anything to date, a very remarkable fact.

The system on which the Desjardin banks are worked marks a further evolution of the type created in the first instance by Schulze in the town of Delitsch. Schulze's system was founded, like Raiffeisen's, on unlimited liability of all members; Luzzatti, who founded the wonderfully successful "Banche Popolari" in Italy, limited the liability; while Mr. Desjardins has gone another step forward in practically abolishing any form of liability at all, and adopting what is known in France as the "capital variable," which is withdrawable almost at will, with '30 days' notice. This is practically the counterpart of the system in vogue in the uncapitalized savings banks of the New England States, where it has been eminently successful for three-quarters

<sup>1</sup> I am indebted to the courtesy of M. Desjardins for the verification of all details and statistics. The information given here may, therefore, be regarded as authoritative.



of a century. Mr. Desjardins states that he was forced to adopt that system as the people in Quebec would never have accepted the unlimited liability nor even the limited liability of Luzzatti.

Mr. Desjardins in the evidence he gave before the Committee appointed to inquire into the Bill before the House of Commons in 1907 has described his system.<sup>1</sup> Put briefly, his banks aim at lending small sums to members on personal security and the honesty of the borrower is considered, not his holding in the bank. The banks work within a very small area where everyone is known to all the shareholders and where every shareholder is interested in the repayment of the loans. The average rate of interest works out at about 6½ per cent.

The banks are never connected with any other Co-operative Society as, in M. Desjardins' view there is a great danger of the banks getting under the control of a few individuals, while control of the whole body through their nominees is, of course, the very essence of the system.

Each association is carried on by three committees, the Council of Administration with from five to nine members; the Credit Committee of three members; and the Supervisory Committee of three; all these committees are appointed by the vote of the shareholders and hold office for two years. The Council of Administration controls the admission of new members, transference or withdrawal of stock, and sees to the general running of the business. By them is chosen the manager—the only salaried official of the concern.

The Credit Committee determine the credit to be allowed to each member and pass on all applications for loans, although the right of appeal to the Council of Administration is granted to the applicant.<sup>2</sup>

The Committee of Supervision, elected by the shareholders, forms a permanent board of supervision and audit, and if necessary, they have the right of suspending the operations of the association until the situation is revised by a general meeting of shareholders.

The capital of each association varies in amount and is raised by selling shares and by receiving deposits. The shares of \$5 each may be paid for by small installments. Every applicant for membership must come before the Council of Administration, and in the words of the association's by-laws, every applicant, "must be honest, punctual in his payments, sober, of good habits, industrious and laborious." Bankruptcy or abuse of the privileges of the society renders a member liable to expulsion. Savings are received, and the general rate of savings bank interest is given.

Twenty per cent of the net profits of each year, as well as ten cents on each share paid as an entrance fee, is put in the reserve fund, and each association has a Providence Fund raised by means of a ten per cent assessment on the yearly profits, until the fund attains a maximum of one-half the yearly profits distributed on the paid-up stock. This fund is formed as an outer bulwark to the reserve, and is designed to meet the first onslaught of any disaster which might threaten the stability of the Credit Union.

There are several exceedingly interesting and significant points to be noticed about the working of the *Caisses Populaires*.

First, the success of the whole project has been brought about solely through the devotion and public spirit of M. Desjardins. It is not too much to say that without him they would never have existed at all. Just as Raiffeisen and Schulze carried through their schemes almost unaided, and in the face of opposition, Mr. Desjardins by his own enthusiasm, faith, administrative ability and faculty for inspiring confidence has carried it through on his own shoulders. And it would seem that this must always

<sup>1</sup> Appendix to the Journals of the House of Commons, Vol. XLII, 1906-7. Part I, appendix

3. The evidence of Prof. Shortt is also most interesting, as is also the evidence of Mr. E. M. Trowern, Dominion Secretary to the Retail Merchants' Association of Canada, as showing the point of view of the retail storekeeper.

<sup>2</sup> The Board of Credit must be unanimous in granting any loan, and they are themselves precluded from borrowing.

be so. Where the great state-aided credit institutions of France went to ruin, the tiny spark lit by one man's faith in Germany has never been extinguished and has indeed revolutionized rural life in that country. It seems to be a natural law that such projects flourish under private guidance, and languish and die under state patronage. Where all the remedial measures of successive British Governments for forty-five years have failed to satisfy Ireland, the wonderful success of Sir Horace Plunkett and the Irish Agricultural Organization Society has transformed many districts. Such a reflection is very pertinent when considering such a scheme as has been advocated in Saskatchewan.

*Second*, the Banks work within a purposely constricted area, and among a very humble clientele, eighty per cent farmers and twenty per cent wage earners, the average loan being between \$40 and \$100, although, of course, larger loans are made.

*Third*, the Banks are doing missionary work in teaching the people the very rudiments of banking. Distrusting banks and banking, the French-Canadian kept his money in his stocking. The Caisses are rapidly changing that, and the people are beginning to deposit their little hoards in the bank. Instances are known where old people have brought in a thousand dollars in notes, the savings of a life-time, to deposit in the bank, this experience being closely similar to that found in Germany. The comparison between such conditions and the widespread banking facilities and activities in the hoards in the western provinces is a striking one. It is interesting to note that M. Desjardins has never met any opposition from any of the chartered banks, but on the contrary help and sympathetic regard. Nor have the chartered banks lost ground, but instead have benefitted through the educative influence of the Caisses, breaking down prejudice against banking in general.

*Fourth*, the Banks of the Caisses Populaires type have been of the greatest assistance to the farming community. In the Levis district several long standing mortgages have been paid off by loans from the Caisse, which loans bear a lower rate of interest than was formerly paid by the mortgagees.

*Fifth*, it must not be forgotten that the stability of the population is very great. Families live in the same village, often in the same house for generations, a very different state of affairs to the fluid, shifting population of the provinces farther west.

A significant point to notice is M. Desjardins's declaration that state assistance in any shape or form other than the protection the law provides is utterly repugnant to his organization. To quote his own words, "I do not believe in state spoon-feeding; there is nothing to be gained from such a weakening regime, except that it tends to kill that all-powerful stimulus of self-help, so strong an educator in a young democracy such as ours. The movement has never and will never receive, while I am living and enjoy any influence, one solitary cent of either direct or indirect help from any Government or public authority."

And lastly may be mentioned a point which M. Desjardins regards as a very satisfactory achievement, namely, that the Caisses Populaires have almost entirely broken up the easy payment system of buying goods, and introduced an era of "spot cash" dealing with the stores.<sup>1</sup>

Such are, very briefly, the main outlines of perhaps the most interesting and successful experiment in co-operation on the American continent.<sup>2</sup>

#### *State Government Loans in Australia.*<sup>3</sup>

There can be no question that in every country this problem of agricultural credit is a pressing one, and each country must do what it can to solve the riddle in its own

<sup>1</sup> Cf. Mr. W. L. Smith's statement with regard to the Grange co-operation.

<sup>2</sup> M. Desjardins, unlike to many would-be co-operators, has preferred to expend his energies on organization instead of advertisement. Little has been written about it, the best a small pamphlet by M. Desjardins himself, "La Caisse Populaire," published by l'Ecole Sociale Populaire, 1075 Rue Rachel, Montreal; price 20 cents.

<sup>3</sup> Cf. Official Year Book of the Commonwealth of Australia, 1913, pp. 416-525. Also report of Canadian Trade Commissioner to Australia, Mr. D. H. Ross, published in No. 49 of the weekly Reports of the Dept. of Trade and Commerce.



way: Australia and New Zealand have done it by instituting a system of state loans to farmers—the very antithesis to the purely voluntary systems of self help and co-operation that have done so much good in other lands.

The system is closely akin to the *Credit Foncier* of France. In a word, the state has gone into the mortgage and loan business, lending at a lower rate than the mortgage companies and saving the borrower as much as possible in fees and preliminary expenses. There is no form of co-operation or mutual liability, each farmer is liable for his own borrowing alone.

While the details differ slightly in the different states of the Commonwealth, yet the broad outlines are sufficiently alike to warrant general statements being made.

The funds for making the advances are raised by the different states generally issuing mortgage bonds at four per cent and this money is lent out at a uniform rate of five per cent to the farmers, the security for advances being from one-half to three-quarters of the estimated value of the property offered as security.

One of the most interesting and significant features of the scheme is the schedule of amortization of the loans. Payments of principal and interest are spread over periods ranging from 20 to 36½ years in half-yearly instalments.<sup>1</sup> In the majority of the states the borrowers must begin to pay off the principal five years after the loan has been made, but at the option of the borrower advances may be repaid at any time.

The primary reason for the establishment of the system was, to quote Mr. Ross, "the high rates of interest charged by companies and private lenders. In all the states the chief object was to enable applicants to pay off existing encumbrances on their properties, and to obviate the frequent renewal of mortgages with coincident expenditure."

The system came into operation in the state of Victoria in 1896, and in fifteen years the trustees of the Loan Fund (in this case the State Savings Bank) foreclosed on and sold twenty-eight farm properties. Out of these twenty-eight farms, only in one instance was there a loss, and that a very small amount on the principal advanced by the state.

In June, 1912, the total amount of mortgages to farmers in the State of Victoria was \$14,773,000, and the amount repaid was \$8,053,900. At that date only ten farmers were in arrears for a total sum of \$468. When the land upon which a loan is asked is accessible by rail the inspection fee charged is \$12.17, if situated further away a pro rata increase is made in the fee. The total additional charge to the borrower for the registration and preparation of the mortgage deed is \$3.65, total expense \$15.82.

"The chief contributing factors to the success achieved," says Mr. Ross, "have been the economical expenditure on management and the effective inspection of all properties upon which loans are made. Many applications for loans are rejected, after careful examination of the securities offered, and the character and industry of the applicant are obviously important points towards influencing a loan being made."

The most important point to be observed in this system is the entire lack of any form of co-operation. The state assumes the functions of a mortgage company, and asks no more than sufficient security from its borrowers giving them in return a long term and low interest charges. Could the ordinary mortgage companies do the same there would be nothing to choose between them. The same result might be very easily accomplished in Saskatchewan were the Provincial Government to enter the field and loan at six per cent. But how many would seriously advocate such a scheme under present political conditions?

<sup>1</sup> The Saskatchewan Commission states that the period is 42 years in South Australia. As far as I can ascertain it is 25 years.

<sup>2</sup> With regard to this the evidence of a writer on New Zealand is of interest. G. H. Scholefield in "New Zealand in Evolution," p. 254, speaking of the introduction of the system into the colony, says: "The effect was instant. Hundreds of struggling men transferred their mortgages to the easier conditions of the state mortgages."

## RECOMMENDATIONS OF THE AGRICULTURAL CREDIT COMMISSION.

It will be superfluous to go into the recommendations of the Saskatchewan Commission in any great detail, since in their broad outlines they follow on the lines of the German *Landschaft*.<sup>1</sup> The Commission proposes to organize under Government supervision an association to be known as the Saskatchewan Co-operative Farm Mortgage Association, subdivided into local associations: with an advisory board of 15 members, the members to be appointed "part by the Association acting through its annual general meeting and the remainder by such organizations and institutions in the province as exist to promote agricultural betterment" which is a sufficiently loose and vague phrase to permit of any one being made a member, whether a member of the Mortgage Association or not.<sup>2</sup>

At the head of the whole association is to be placed a central commission of three members appointed by the Government, one to be a managing commissioner on a salary, who will devote his whole time to the business of the association, and is to be apparently the only paid expert in the whole organization. It will be well to compare this proposal with the system of highly trained experts (*Syndics*) who manage the business of the German *Landschaften*. In Saskatchewan with no previous experience, and under admittedly difficult circumstances, it would appear that the running of the local associations is to be left to the individual members, while in Germany with all the traditions of nearly a century and a half behind them trained civil servants are still required to keep the associations off financial rocks.

But it is when we come to the recommendations with regard to the local associations that the real difficulty arises. Local associations are to be set up, the members of which are to be mutually approved by one another, each association to consist of at least ten members, all borrowers with a minimum combined mortgage loan of \$5,000, united on the basis of joint and several liability. The liability of the individual as member of a local association or of the central association is to be fixed at not more than 50 per cent greater than the amount of his loan.

In considering these points the following objections may be raised:—

1. There is no counterpart in the German *Landschaft* system for this joint and several liability. In that system the liability is collective for the whole association and the small groups of members in different localities are not liable for the debts of their immediate neighbours.

2. In the *Landschaft* system there is no mutual consent of other members necessary. Once having established that his land is worth so much the prospective borrower can claim a loan. What need is there for mutual consent? If the loans are going to be limited to 40 per cent of the estimated value of the land there can be no doubt as to the adequacy of the security. The commissioners have evidently been led away by their desire to invest the scheme with a co-operative character into introducing a form of mutual assent which is entirely unnecessary.

3. Will it be practicable to introduce such local associations? Who will become members and who will be kept out? It is quite possible that the men who will be blackballed for membership will be the very men who are most in need of assistance. Those who have lived in a farming community know that personal feeling may sway such elections, to say nothing of political prejudices. What farmer, who has perhaps only just got his own head above water, will assume a liability for a loan to another farmer whom he may regard as financially unsound, a poor farmer, and a probable failure? The local associations will become hotbeds of intrigue

<sup>1</sup> It is curious to note Senator Duncan U. Fletcher has introduced a Bill into the United States Senate (No. 2909), to set up a system of "national rural banking" in the United States, his proposals following closely on the Raiffeisen system and rejecting the *Landschaft*.

<sup>2</sup> The Commission suggests, such organizations as the Grain Growers' Association, the Convention of Agricultural Societies, the Union of Rural Municipalities, the Provincial Winter Fair Board and the University of Saskatchewan.

and jealousy. One can easily imagine the state of local feeling when a certain farmer has been blackballed for membership and proceeds to "kick" in consequence.

Indeed this point as to co-operative action raises a very serious question. Are farmers of the West ready and willing to undertake what are most undoubtedly the very serious and onerous responsibilities of co-operation? It may be said that co-operation is already flourishing, witness the Co-operative Elevators in Saskatchewan. But the Co-operative Elevator Company is scarcely more co-operative in character than any joint stock company, and the name "co-operative" is something of a misnomer, when scarcely twenty per cent of the paid-up capital has been subscribed by members, and eighty per cent put up by the Provincial Government.

It is true that certain co-operative enterprises are afoot in the West. We hear of carloads of binder twine, coal, etc., being purchased, but such affairs are mere bagatelles when compared with such a great undertaking as is proposed here.

Indeed this point opens up a very serious consideration as to the willingness of the Western Farmers to co-operate at all. In the evidence before the commission several witnesses alluded to this and doubted whether the farmers would ever stand by the spirit of co-operation. The history of co-operation in Canada and the United States is not inspiring, in fact it is a record of failure. The History of Co-operation in the U.S.A., issued by the Johns Hopkin University, tells a tale of disaster, bad management, embezzlement, internal dissensions, and lack of business acumen, and the small pamphlet on "Agricultural Co-operation in Ontario," by S. E. Todd, issued by the Ontario Department of Agriculture, is little better.<sup>1</sup>

An investigation carried on by the United States Department of Agriculture in which over nine thousand replies were sent in by men in touch with agricultural matters, to the query as to whether the farming class would be willing to try some form of co-operative action in obtaining loans, elicited a remarkable result. Thirty-two per cent of the replies stated that no farmers would be willing to form such an organization, and the remaining correspondents reported that barely 40 per cent of the farmers stood ready to organize such co-operative associations. The sturdy independence of the farmer would seem to breed a certain lack of the gregarious instinct and without it co-operation cannot exist. A great deal of missionary work would doubtless be necessary before the idea spread to any appreciable extent.<sup>2</sup>

*First*, the very freely and generally voiced fear of the organization becoming the object of party politics, the spectacle of candidates for the legislature outbidding each other in promises of large loans being a not too remote possibility.

*Second*, the asserted lack of business acumen on the part of the farmers. An interesting comment on this was provided in the evidence given at Wolseley where it was averred that the root of the trouble lay in the fact that in the past it was only too easy for farmers to obtain loans at high rates of interest "for expenditures which were quite unjustified in an economic sense." It was, however, agreed that lower rates of interest and rigid supervision of expenditure would raise the level of business practice.

But indeed the whole question of the practicability of introducing any form of co-operation in the west is a very serious one, and it may be well to cite a few more objections that were raised against such a scheme by witnesses before the Commission.

*Third*, the assertion that mixed farming would prove the salvation of agriculture

<sup>1</sup> It is but fair to add that I was favoured by a letter from Mr. W. L. Smith, Editor of the *Weekly Sun* of Toronto, a leader in the "Grange" Movement in Ontario, in which he claimed that the co-operative activities of the Grange and Patrons of Industry having achieved their object in having broken down the bad system of long credits at the country stores, died down, their work finished.

<sup>2</sup> "In Canada there is no co-operative spirit. This country is full of individualism, the farmer in Canada won't become security for his fellow." Evidence of Sir Edmund Walker before the Committee on Banking and Commerce, 1913.

A similar statement by Mr. J. E. Bradshaw, M.P.P. for Prince Albert in the Saskatchewan Legislature, in the debate on the second reading of the Co-operative Mortgage Bill, Dec. 15, 1913, was met by angry protests from all over the House, one member giving the Co-operative Elevator Company as an instance, which Mr. Bradshaw acknowledged. He would have done better to have stuck to his guns.



rather than any artificial, extraneous assistance was freely and very generally expressed. Indeed, the reiteration of the importance of mixed farming for the West is a most significant piece of evidence, showing that the efforts of the agricultural colleges to impress this fact on farmers are not fruitless.

*Fourth*, the unhomogeneous character of the settlements and the migratory tendencies of the population. One farmer at Saskatoon declared that he had been for twenty-two years a settler of the Nutana district, that to-day he was the only man left in the settlement who had been resident there when he came in, and that ninety per cent of the people who are there now are anxious to leave.

And lastly, as one witness at Melville said, the absence in the Canadian West of that sentiment of thrift which prevails elsewhere. It is curious to note how this point is reiterated through the evidence. More than one witness mentions trips back home as one reason for mortgages, others speak of farmers buying high-power automobiles, while several mention the most significant fact of all, namely, the raising of mortgages for real estate speculation. Let it be remembered that this is the evidence of farmers themselves and such evidence must be judged on its own merits.

Only one more consideration remains to be mentioned on this point. It is common knowledge in the West that hundreds of farmers are working more land than they can manage, buying more machinery than they can afford (and letting it rust to pieces in the winter to boot), and borrowing more money than they can repay. Would the proviso in the Committee's report that all applications for loans should be investigated and the purpose for which they are required specified, be a popular one in Saskatchewan? Perhaps there would be a little less real estate speculation.

#### CONCLUSION.

When there is poured into a land which, though marvellously fertile, yet demands great efforts, abstinence and risks, an unhomogeneous mass of all kinds and conditions rich and poor, experienced and ignorant, industrious and idle, there will assuredly be a period of stress, a time of settling and shaking down into place. That time the Province of Saskatchewan has reached. Strong in the faith of her wonderful resources and the richness of her soil, the province has freely discounted the future and credit has outrun production. And now the pinch is being felt. Money is scarce, and the implement companies are pressing for payment. Some of the farms are not producing so many bushels to the acre as they they used to, machinery has to be renewed and live-stock bought.

How shall these problems be met? It is easy to preach mixed farming but harder to put it into practice, and it is equally easy to clamour for cheaper credit and harder to procure it. The commissioners in their report are a trifle dubious as to the marketing of the bonds of the prospective association, in fact they admit the task of finding purchasers would be much simplified were the provinces of the Dominion admitted to the privileges of the British Trustee List, a contingency which is somewhat remote.<sup>1</sup>

What then shall we say as to the probable success of this scheme? Except for a few things which are open to amendment it is modelled more or less on a system that has flourished for over a century. Wisely rejecting the Raiffeisen alternative as being impossible, and adopting the Landschaft type as being more in accord with local conditions and the character of the people, the Commissioiers are at the very least justified in recommending to their government proposals for a scheme which may very possibly prove to be effective. That the recommendations will be modified is certain; the mutual liability of members cannot hold, the genius of the people is against it.

<sup>1</sup> So difficult is the problem of raising money for the scheme, that Premier Scott, in the debate in the Saskatchewan Legislature on Dec. 15, 1913, announced that the Bill would be passed but not put into operation, being kept, as it were, in cold storage until a more favourable opportunity arises for selling the bonds in the foreign market. The Saskatchewan Government evidently does not anticipate that the bonds will sell in the Province.

The problem of agricultural credit has been solved by different countries in different ways, but it has been solved by every country that has faced it. To suppose that Western Canada is incapable of finding a way out of the difficulty is absurd, the only question is, will the recommendations of the Royal Commission prove the right ones? To this we must answer that the co-operative bank system of the Raiffeisen and Desjardins' type is utterly foreign to western ideals; that the Australian state loans system is impossible from political reasons; the Landschaft system, modified to suit the local conditions is the only thing left. To the province of Saskatchewan belongs the honour of making the attempt to inaugurate it in Western Canada.

H. MICHELL.



## APPENDIX No. 31.

OFFICIAL SYNOPSIS OF THE REPORT OF THE AGRICULTURAL  
CREDIT COMMISSION OF THE PROVINCE OF  
SASKATCHEWAN, 1913.

The report is a unanimous one, being signed by the three commissioners, J. H. Haslam, Chas. A. Dunning, and Dr. E. H. Oliver. It comprises 386 pages of type-written matter and several appendices. Printed copies of the full report will be available in a few weeks' time and may be had free of charge upon request addressed to the Department of Agriculture, Regina.

Following a copy of the Royal Commission come the acknowledgments of the commissioners to the persons and organizations that have assisted it in its labours.

## INTRODUCTION.

An introduction sets forth the fact that "cheap money" so-called forms only one phase of the whole great problem of reordering rural life which European countries have so successfully accomplished through the medium of agricultural co-operation. It is pointed out that there, as with us, agriculture was the last industry to become organized and that the rural rebirth of Europe, carrying with it better and cheaper agricultural credit, dates from the organization of the farmers along co-operative lines. Through organization their agriculture has been profoundly affected on three sides, viz., as an industry, as a business and as a life. And the problem is no less broad in Saskatchewan. In the words of Sir Horace Plunkett, the apostle of rural Ireland, "Into the industry you must introduce the teachings of modern science, as it has been introduced into every other important industry. Into the business must be imported methods of combination, simply because, under modern business conditions, transactions must be on a large scale to be economical. The life of the rural community must also be modernized by making it physically more comfortable, mentally more satisfying and socially more enjoyable." Out of this grows a slogan for Saskatchewan farmers: "Better farming, better business, better living."

The legitimate place of credit facilities in agriculture is also pointed out in the introduction.

After outlining the procedure followed by the Commission in its inquiry, the report proceeds to a consideration of agricultural credit as it exists at the present time. Respecting mortgage credit this conclusion is reached: There is great need of cheaper credit, based on sound security spread over a considerable term of years, applied to assist mixed farming and to improve the lot of the average farmer on a half section. The Commission concludes from the evidence it received that four-fifths of the patented farms of the province are mortgaged and at a rate of interest on the average in excess of 8 per cent. The rate of interest, too, tends to increase rather than to decrease. Owing to the smallness of the annual payments of principal required and the general lack of insistence upon the payment even of these, there is found to exist in Saskatchewan under the guise of short term mortgages, a system in reality of long term loans on mortgage.

After analyzing a great deal of information relating to mortgages prepared for it in the offices of the registrars of the Supreme Court and of Land Titles throughout the province, the Commission summarizes the data submitted in these words:

## SUMMARY OF MORTGAGE INFORMATION.

During the period of fifteen months ended August 15, 1913, there were no less than 1,723 sale and mortgage proceedings under mortgage in this province. It should be pointed out that the returns given above are not quite complete. Probably not less than 2 per cent of the farmers of Saskatchewan were subjected to these proceedings under the conditions that obtained in this period. Of the mortgages in connection with these proceedings 150, or 8.7 per cent, bore an interest rate less than 8 per cent. But 435, or over 25 per cent, bore an interest rate higher than 8 per cent; 261, or over 15 per cent, a rate of 10 per cent or higher; 35 a rate of 12 per cent or higher; and 3 a rate of 15 per cent. And these mortgages were placed at these rates before the present upward trend in interest rates occurred.

## BUSINESS HABITS OF THE FARMER.

The business habits of the farmer come in for some comment. It is made clear that the unavoidable uncertainties of farming and marketing frequently render prompt payment difficult if not impossible, but it is also stated that when delays do occur, many farmers fail to notify the company. The conclusion reached is that interest payments are usually met the year they fall due, payments on principal are seldom pressed for, and renewal of the mortgage is made easy.

## LONG TERM MORTGAGES.

"In fact the present system of payments seems designed to render renewal necessary and debt perpetual. With the final payment so large the borrower can seldom meet it out of the current year's income. The mortgage is not only renewed; the amount of the loan is very frequently increased.

"These features of our mortgage system are reprehensible. The mortgage is not calculated to develop business habits nor promptness. It is a document that places the farmer, from the beginning, in an impossible situation. It holds out to him the prospect of confronting a payment which he can never hope to meet. Under the guise of a short term mortgage there actually exists a system of long term mortgages, but with this difference, that the farmer is compelled to renew every five years or lose his farm should he fail to meet the mortgage. The system of long term mortgages with repayment on the amortisation plan encourages promptness and does away with that spectre of the final payment which, like the sword of Damocles, hangs suspended over the farmer."

It is pointed out that the mortgages are numerous rather than heavy.

## WHY LOANS ARE SECURED.

The purposes for which loans on mortgage are granted may be enumerated:

1. To consolidate past debts.
2. For machinery. In this matter there has been considerable overstocking, due, as one farmer stated, to the "science of salesmanship."
3. For stock.
4. For building and general equipment.
5. To provide working capital.
6. To buy more land.
7. To "finance trips East" or similar purposes.

## GRAIN GROWERS ASSOCIATION ON LEGITIMATE USE OF LOANS.

A representative of the West Eagle Hills Grain Growers' Association placed before the commission the following statement of the legitimate uses to which long term mortgage credit might be put:—

"The purchase of stock of all kinds necessary for scientific and correct farming, together with adequate stable accommodation for the same; the digging or drilling of wells to secure a sufficient water supply, together with an equipment necessary, such as small gasoline engine and pump jack for pumping water where a large supply is necessary or a well is unusually deep; fencing for pasturage or corral; the purchase of seed grains that are of an earlier or more productive variety; to redeem notes of the large machinery companies that are harassing farmers so relentlessly at the present time; or for any other addition to the foregoing that would tend to save labour and put the keeping and raising of stock and the production of grain upon more sound, satisfactory and scientific basis. It should be assumed that mortgages under this head should be limited to farms of one-half section in extent, which should have been resided upon and worked continuously during three years previous to the application for mortgage."

#### THE PROVINCE AND THE BANKS.

Regarding personal credit, as distinct from mortgage credit, and which is furnished principally by merchants, dealers and banks, the report says in part:

In appreciating the banking situation in this province it is fair to consider not only the complaints against the banks, but, as well, the services which they have rendered:

##### 1. Services rendered by the banks:

(a) Until recently they have in general afforded an abundance of credit;

(b) They have pushed out into the smaller places and granted credit facilities when the amount of business to be secured immediately did not yield a profit;

(c) They have exerted an educative influence upon the business habits of the community and inculcated the virtue of promptness.

##### 2. Complaints against the banks:

(a) They have frequently sought to dominate the policy of those businesses to which they have advanced credit;

(b) They have sought rather to pay dividends and to support expensive edifices than to afford credit to customers at reasonable rates;

(c) They are not controlled within the province and in a time of stress when credit facilities are most required, the banks withdraw them from the western provinces;

(d) Their charges for transferring funds are unreasonably high;

(e) The rate of interest on loans is unnecessarily large;

(f) The interest allowed on deposits is too low;

(g) Their sympathies lie rather with the commercial than with the agricultural class.

The difficulty of securing bank credit in 1913 as compared with other years and rates of interest are then discussed. The practices of charging a minimum rate of \$1 on small loans, of deducting the interest from the loan when made and of charging interest for days of grace when the loan is repaid previously, come in for consideration and some criticism.

#### INDEBTEDNESS OF SASKATCHEWAN FARMERS.

It is well nigh impossible to estimate with any degree of accuracy the amount of the indebtedness of the farmers of this province. The Commission gave every facility to implement companies, loan companies and banks doing business within the province to make an analysis of the credit extended to the farmers and of their loans and deposits.

## WHAT FARMERS OWE.

There is no doubt that the largest factor in the indebtedness of Saskatchewan farmers is the amount which is due to mortgage companies. A conservative estimate would place this in the neighbourhood of \$65,000,000. For the next largest amount implement companies are responsible. We are certain from evidence submitted confidentially to the commission by only a limited number of branch offices that the total indebtedness of farmers to merely six branch offices is \$15,106,726.68. It is not improbable that at present between \$35,000,000 and \$40,000,000 is outstanding for machinery. The amount owing on agreements of sale for land is very considerable. To one company the farmers of this province owe \$5,770,000 and to another \$3,622,920.45. The amount due for pre-emptions, for horses, for store credit, lumber, bank credit and for miscellaneous debts, together with that due for the purchase of land is not less than \$50,000,000. The farmers of Saskatchewan are paying interest on at least \$150,000,000. If this is the case then their agricultural credit is costing them \$12,000,000 annually. The saving of only 1 per cent in interest would mean the saving to the farming industry of over \$1,500,000 per year. If farmers could secure money at a rate as much as 2 per cent cheaper than at present they could, by making their payments on the amortisation plan, discharge their total indebtedness in about 24 years' time by simply continuing to pay what they are now paying for interest. And this would be abundantly worth while.

## THE DEBT PER ACRE.

From the above estimate it can be clearly perceived that the average indebtedness of our farmers is, perhaps, \$1,500. The average farm of the province consists of about 295 acres. Thus the indebtedness of the farmers is slightly in excess of five dollars per acre of land under occupation at the present time. The average farm has gathered about it assets in the shape of buildings, stock, implements and grain. When we remember that the province is in its infancy, that many of our people came here with no other resources than resourcefulness, strong determinations and the willingness to work, and that they have met with energy and courage the problem of planting a home in a new land, we can have no doubt that our farmers are solvent, that their assets compare favourably with their liabilities. But the thoughtful citizen will, nevertheless, regard the present situation as calling for serious attention.

It is impossible in this synopsis to give any account of the methods which the commission found in existence elsewhere for facilitating agricultural credit. Under this heading all of the institutions for this purpose found in Germany, Italy, Hungary, Austria, Denmark, France, Great Britain and Ireland are described and discussed, and those existing in India, New Zealand and Australia, which could not be visited by the Commission are also dealt with.

The observations of the Commission from investigations in Europe are stated as follows:—

## GENERAL OBSERVATIONS FROM INVESTIGATIONS IN EUROPE.

1. There is in all European countries a frank and universal recognition of the supreme importance of agriculture as an industry, as shown by:

(a) Government co-operation in:

1. Education;
2. Facilitating credit;
3. Promoting co-operative institutions for production and distribution of products;
4. Supervision of processes;
5. Application of scientific knowledge.



(b) Sympathetic attitude of urban communities toward agriculture.

(c) Active preparation in agricultural affairs on the part of public spirited citizens and national leaders.

2. Co-operation in everything that affects agriculture has advanced beyond the theoretical into the practical stage.

#### BENEFITS OF CO-OPERATION.

3. Co-operation has conferred enormous benefits upon the rural communities of Europe by:

(a) Stimulating production;

(b) Increasing the area under production;

(c) Improving the price of products;

(d) Opening up markets;

(e) Cheapening the cost of farm necessities;

(f) Reducing the expenses of transportation;

(g) Finishing the products of the soil on the farm;

(h) Use of live stock in the utilisation of roughages of the farm and the return to the soil of natural manures;

(i) Putting farming on a business basis:

(1) By providing credit;

(2) By systematising business organisation;

(j) Stimulating scientific agriculture;

(k) Preventing frauds and deceptions in the purchase of raw materials;

(l) Improving breeds of animals and plants;

(1) By community breeding and cow testing associations;

(2) Seed selection and distribution.

4. By organisation farmers have been able to provide a security which has attracted loans at favourable rates.

5. Agricultural security has been based upon:

(a) Mortgage upon the amortisation scheme covering a considerable period of time and at reasonable rates;

(b) Personal credit associated with

(1) Collateral;

(2) Indorsements.

6. By attracting local deposits to co-operative credit associations the resources of local communities have been made available in the first instance for local purposes.

7. The securities based upon land credit have been in the main less susceptible to the fluctuations of the money market than other securities.

8. Though in various places the nominal rate of interest is as low as 3 per cent,  $3\frac{1}{2}$  per cent and 4 per cent, yet the market value of bonds is such that the present borrower is forced to pay an actual rate considerably in excess of this.

9. A system of registration of Land Titles similar to the Torrens System is of basic importance in securing agricultural credit.

10. Every effort is made to dispose of the bonds locally.

11. The face value of the bonds outstanding in no case exceeds the net value of the mortgages held and frequently withdrawal rights are inserted in the bonds.

#### AUSTRALIA.

The Government Agricultural Banks of Australia, patterned largely after some European models, are described in a chapter, of which the opening paragraphs are as follows:—

“Agricultural banks, established, owned and operated by governments are found to-day in various quarters of the world. It cannot be denied that they have rendered



substantial service to the rural population of New Zealand and Australia. It is as yet too early to estimate the usefulness of the one recently established in the Philippine islands.

"The Agricultural Banks of Western Australia, Queensland and Tasmania, the Government Savings Bank of New South Wales, the State Savings Bank of Victoria, the State Bank of South Australia and the State-Guaranteed Advances of New Zealand conform somewhat closely to one common type. The deviations are due in a large measure to differences in the wealth of the various communities and in the character of the land system. In each case an advance fund is raised by the issue of mortgage bonds or debentures guaranteed by the government and the administration of this fund devolves upon a small central board. The purposes for which advances are made are similar, though not identical. The security demanded is of the highest character, generally a first mortgage. In no instance is more than two-thirds or three-fifths of the value of the property offered as security granted, except only in the case of South Australia, where a special advance may be made when the land is under cultivation as a vineyard or an orchard. Provision is usually made for the proper expenditure of advances. When they are not applied for the purpose for which they have been granted, or are expended in a careless or extravagant manner, the central board is authorized to refuse to pay further instalments of proposed advances and to call in the whole amount already advanced. The repayments cover a considerable term of years, as great as 36½ years in New Zealand and 42 years in South Australia and are made by equal half-yearly instalments to cover principal and an interest rate of about 5 per cent. Unpaid instalments and other moneys due under the mortgage may be recovered in a court of competent jurisdiction. The borrower is entitled to repay the balance or any portion of the principal money with accrued interest on any day appointed for a half-yearly payment."

## CHAPTER VII.—SUMMARY.

There seem to be three ways of establishing agricultural credit in the province upon a basis to provide money at a reasonable rate:

(a) *Strictly co-operative*, that is to say, a Co-operative, Credit Three methods. Association based upon:

1. Unlimited liability; or
2. Liability limited to a certain multiple of the share capital or certain percentage in excess of the obligations incurred.

(b) *Strictly Governmental*, that is to say, a provincial bank with land mortgage features or a provincial mortgage institution with banking features.

(c) *Co-operative Credit Association* with an initial government guarantee adequate, and a supervision sufficient, to establish, within a term of years, the independent credit of the association.

In case any one of the three suggested plans were adopted the Commission is of the opinion that three principles should be laid down:

1. Loans should be provided to farmers only upon unquestioned security and for approved agricultural productive or improvement purposes only.
2. Provision should be made for repayment upon the amortisation plan.
3. The aim should be to render a service to the borrower, and not to secure profit to the institution.

## WHAT IS INVOLVED IN EACH SCHEME.

In case the strictly co-operative credit association were established, this would necessitate: (a) *Strictly co-operative.*

(a) A series of local associations composed of individuals grouped together on the principle of unlimited, multiple or additional liability.

(b) A federation of these local associations into a central organization to serve as a clearing house for the locals, a supervisory body and representative to the outside world.

(c) The raising of money by:

1. Mortgage bonds to be sold upon their own merits in the open markets of the world.
2. Deposits from members and non-members;
3. Share capital or fees from members.

In case a strictly governmental scheme were established this would necessitate:— (b) *Strictly governmental.*

(a) A central bank or mortgage institution.

(b) Local branches established and controlled by the central.

- (c) The raising of money by—
  1. Foundation capital provided by the government;
  2. Issue of mortgage bonds guaranteed by the government;
  3. Deposits by:
    - (a) Government;
    - (b) Citizens.

(c) Co-operative and governmental.

In case a co-operative credit association with at least an initial government guarantee and supervision were established, this would necessitate:—

- (a) A central commission for organization and management:
  1. In the first instance to be appointed by the government;
  2. To be replaced gradually and ultimately by representatives of local associations.
- (b) Local associations established on the principle of collective liability:
  1. Directly by central commission;
  2. On local initiative, but with supervision and consent of central commission.
- (c) The raising of money by—
  1. Bonds guaranteed by the government to be covered by the first loans issued on mortgages;
  2. Further issues of mortgage bonds guaranteed by the government till the credit of the association is established;
  3. Deposits.

#### ADVANTAGES AND DISADVANTAGES.

(a) Strictly co-operative.

The *advantages* of the strictly co-operative credit association are:—

- (a) Self-government.
- (b) It would not impair the credit of the provincial government.
- (c) It would be absolutely free to promote other co-operative activities.

The *disadvantages* of the strictly co-operative credit association are:—

- (a) The difficulty of securing local organizations of sufficient size and number in our as yet sparsely settled province to establish the project upon an independent footing.
- (b) The time required:
  1. To perfect the organization.
  2. To secure funds to provide any considerable relief.
- (c) The difficulty of securing such a recognition in the markets of the world as would secure funds at a reasonable rate.

(b) Strictly governmental.

The *advantages* of a strictly governmental scheme are:—

- (a) Its recognition in money markets both at home and abroad should be instant.
- (b) It could be launched on an adequate scale without unnecessary delay.
- (c) It would give unquestioned security to attract deposits.

- (d) It would supplement the present banking machinery of the province by the addition of banks which possessed primarily provincial sympathies.

The *disadvantages* of a strictly governmental scheme are:—

- (a) The possibility of partisan political interference.
- (b) The continuous impairment of the credit of the provincial government.
- (c) It would fail to foster co-operative action between farmers.

The *advantages* of a co-operative credit association with at least an initial governmental guarantee and supervision are:—

- (a) Its recognition in money markets both at home and abroad should be instant.
- (b) It would be launched on an adequate scale without unnecessary delay.
- (c) It would give unquestioned security to attract deposits;
- (d) It would supplement the present banking machinery of the province by the addition of banks which possessed primarily provincial sympathies.
- (e) It would stimulate the spirit of co-operation among farmers.

(c) Co-operative and governmental.

The *disadvantages* are:—

- (a) The possibility of partisan political interference in the early years of the association.
- (b) The impairment of the credit of the Provincial Government to a limited degree and for a limited time.

Investigations both at home and abroad have convinced the Commission that a strictly independent co-operative credit association is not under present conditions feasible. The other two schemes both involve the necessity for the present at least:—

- (1) Of securing far the larger portion of the money required from sources outside the province;
- (2) Of active co-operation on the part of the government of the province.

This province needs both a mortgage business and a banking business closely and intimately associated with the interests of its people. The issue of mortgage bonds and the loaning of money on mortgages, i.e., a mortgage business, is a distinct type of business from the receiving of deposits and making short time loans, i.e. a banking business. But if the machinery of the mortgage business should be distinct and separate from that of the banking business, the general policy of both should be the same, to promote the interests of the borrower. In Germany the *Landschaften* have overcome this difficulty by establishing as a daughter but separate institution a bank to transact the banking business for the *Landschaften*, to receive deposits and to advance short time loans. The directors are the same, the general policy identical, but the machinery has in each case been adapted to the needs of the different types of business. The difficulty, however, of launching two projects successfully at one and the same time, helpful and necessary as they may be, makes it advisable to establish the bank *after* the mortgage institution.

Linking personal and mortgage credit.

Provincial  
assistance  
required.

At present provincial assistance would appear indispensable, if service is to be promptly or adequately rendered. The task of inaugurating the whole scheme rightly devolves upon the provincial government. It should be prepared:—

1. To pay expenses of organization.
2. To provide certain guarantees for the mortgage association.
3. To render assistance in the establishment of the bank at a later date.

## CHAPTER VIII.—EXISTING ECONOMIC CONDITIONS IN SASKATCHEWAN.

The situation in Saskatchewan merits the most serious consideration. The conditions of our economic life, and particularly of our agricultural economic life, cannot longer pass unchallenged. In a large measure the springs of our material progress must arise within the borders of our own province. Hitherto our fortunes have depended too largely upon outsiders, who, naturally enough, have had their own interests to serve. It is eight years since we became a province and in that time we have accomplished much. We have laid the foundation of many provincial institutions. But much remains. We must at all hazards beget a provincial consciousness. We must promote the cohesiveness of rural life in our midst. We must in greater measure become masters of our fate and authors of our own policies. To accomplish this we need to co-operate and to apply ourselves to that type of agriculture where co-operation counts most. More diversified farming and better organization for purchasing and distributing will lead us far towards the solution we are seeking. To continue selling grain in the lowest market and buying supplies in the highest is only fatal. If the farmers unite, they can accomplish in other spheres what they have achieved in the elevator business—they can to a larger extent regulate the conditions of their own industry; and the result will not be simply economic. The benefits will extend to every department of our moral, social and political life.

What Saskatche-  
wan needs.

Up to the present wheat has been our chief product; and wheat is a world product, with the price fixed at Liverpool, where world forces operate. Every charge against this wheat from local shipping points to Liverpool, or whatever may be its ultimate destination, is not only subtracted from the farmer's income, but is levied at points and under conditions over which, except for the operations of the farmers' co-operative companies, the farmer has absolutely no control.

Our dependance  
on transportation.

Our geographical situation places Saskatchewan farmers at the mercy of those who profit by transporting the wheat the farmers have laboured to produce. We live in the heart of a great continent, far from water transportation, so far, in fact, that our competitors in world markets have, without exception, a natural physical advantage which yields them a cash advantage per bushel of from 5 to 8 cents. It is not denied that we owe much, perhaps everything, to the building of railways. It is only contended that the cost of transportation adds enormously to the burdens that the farmers on the prairies must under present conditions bear.



It is not our intention in this connection to examine the merits and defects of the Dominion tariff policy nor to investigate its suitability to the country as a whole. It is not even urged that a policy which is Dominion wide in its scope could possess the merit of special adaptation to the particular needs of this province. At present only one point is insisted upon—that tariff, as an actual fact, takes slight account of western agriculture; and the tariff will continue to impose its load upon the farmers, not because they desire it, but because our fortunes are determined by those who live outside our borders.

Our relation to the tariff.

What is true of transportation and the tariff is true as well of manufacturing, finance and banking. It is with the latter that we are at present concerned. With the exception of two or three financial institutions only recently established, and as yet too small to constitute an important exception, we have no financial institutions of our own. We do not furnish directors to the banks that operate in our midst. It is not in this connection alleged that the banks and loan companies have failed to provide credit facilities. It is not even suggested that they have encouraged speculation by a too indiscriminate granting of credit. It is only contended that we have had to depend upon the wisdom and sympathy of Winnipeg, Toronto and Montreal. The time may be far distant when this province will be independent of outside sources of supply for the funds necessary for its development and growth; but the time is already at hand to develop financial institutions with local provincial sympathies. We desire to supplement, not supplant, that which exists; for it is easy in a time of stress for the Corinthian columns of the metropolis to shut out from view the rude shacks of the prairie farmer.

Our credit institutions controlled from without.

We have no need at this time to examine the whole economic environment of Saskatchewan agriculture. Still it has not escaped us that in the solution of particular problems the task which confronts us is at once larger and more complex than appears at first blush. In their essence the problems of our rural life are intimately interrelated. No solution can come to the question of agricultural credits which has not, at the same time, arisen out of a serious study of general, and more particularly of market problems. For this reason it is important to point out that the Commission on Agricultural Credit was associated with that on Grain Markets, and that in the various centres of the province the general problems of grain growing, mixed farming and marketing were investigated at the same time as the question of Agricultural Credit.

Relation of inquiry to that on grain markets.

Before endeavouring to indicate what may be at least a partial solution to the economic difficulties that confront our rural population, it will be helpful briefly to enumerate the more pressing among them:

Economic problems.

1. The dependence of our economic life upon outsiders.
2. Our location in relation to the export market for our principal farm products.
3. The lack of cohesiveness in our rural life.
4. The primitiveness of market arrangements for products other than grain and dairy products.
5. The absence of concerted action in the sale of products other than these.

6. The lack of even collective action in the purchase of farm supplies.
7. Too exclusive devotion to grain growing.
8. A tendency towards extravagance, especially in the purchase of implements, land and expensive sources of power.
9. Relatively high rates of interest and short terms for mortgage and personal loans.
10. The large amount of credit associated with the purchase of agricultural implements and farm supplies.
11. The attractions in the past of real estate speculation in urban communities.
12. The lack of social atmosphere in rural districts.
13. The enforced idleness during winter months in localities where only grain is grown.

#### Our policy.

For much of this we have no remedy. We cannot alter the facts of geography, nor amend those handicaps which arise from physical conditions. It is not possible to bring this province nearer to the Great Lakes, though much may be gained from the route to Hudson Bay and something from the Panama canal. The tariff, as such, is a matter for the whole Dominion. We cannot, so long as we remain comparatively undeveloped, build up those great reserves of funds which come from thrift and which make cheap credit possible; but there is something that can be achieved. By concerted action and intelligent marketing we can eliminate at least some transportation charges, and we can outline a rural policy that will broaden and deepen as the years pass by. That policy must be: *While seeking to encourage in every way trade and markets with other provinces of the Dominion and countries of the world, and to reduce to a minimum the costs of transportation and other charges, before everything else to strive by every effort to foster such economic relations within the province, as will promote greater cohesiveness of rural life, yield to the producer a larger share of the returns from the products of his farm, while at the same time cheapening the costs of such products to the provincial consumer, and give to the people of this province a larger control over the conditions of their own material progress.*

### CHAPTER IX.—THE SOLUTION IN THE LIGHT OF EXISTING CONDITIONS.

#### A new era.

The province is at the beginning of a new era. We have come in and possessed a goodly land—that has required enterprise and energy. Other virtues must henceforth be more largely called into play. Individual effort has been its reward and it has been abundant. Henceforth thrift and intelligent co-operation will play a greater role than hitherto. In view of the changing conditions of our economic life, the Commission believe that a solution of our problems must be sought along two lines, which after all do not greatly differ.

1. The spread of co-operative effort, especially at present, in the direction of selling and purchasing.

2. The fostering of financial institutions of our own, with sympathies for our own problems and control by our own people.

### 1.—CO-OPERATION.

The need of our agricultural life is closer organization. The farmer should be a cell in a rural organism. As it is, in his relation to every other industry he stands as an individual unit. He must accept low and give high prices because he acts only for himself and by himself. Between himself and his fellow farmers alone is there unrestricted competition, a competition from which he can expect only to suffer. But while agriculture is unorganized, every other industry is highly organized. Whereas tradesmen and dealers invariably possess among themselves understandings and a common policy, farmers have ever occupied too isolated a position and too detached a relation to invite or reward competition on the part of those who seek their trade. They do not act together sufficiently to induce sellers to lower, or buyers to raise, prices to secure a large block of business; and in this province their too exclusive devotion to grain production has fostered this aloofness from each other. The co-operative purchase of binder twine and the achievements of the Co-operative Elevator Company constitute splendid exceptions. But, with a larger measure of mixed farming, and its attendant greater compactness of settlement, the more uniform distribution of labour throughout the year, the consequent development of markets within the province itself, and the disappearance of the instinct to stake the success of the whole farming industry on a single throw for which exclusive grain growing is responsible, the way would be clear for united action and for that success which the operation of co-operative creameries so happily foreshadows. At present the urban Saskatchewan consumer buys butter from afar, and pays the cost of transportation, while at the same time some rural Saskatchewan producers (unnecessarily, in view of the government creamery policy) send as good or better butter outside the province and lose the cost of transportation. Co-operation in this matter and a dozen others would largely eliminate this double charge for transportation, would increase the profits of the producer, decrease the cost to the consumer and tend to bind our population into an economic whole.

Agricultural co-operation has produced a rural rebirth in Denmark, Germany, Italy, Ireland and other lands. These countries have found the co-operative society rather than the joint stock company suited to secure better prices for the sale of produce and the advantages of wholesale purchase of agricultural supplies. The reason is not far to seek. The profits of the latter belong to the shareholder who may or may not give his patronage to the company; but the profits of the former belong to the purchaser according to the extent of his dealings, and furnish a constant incentive towards fostering the development of the co-operative society.

The chief advantages of co-operation as applied to agriculture may be briefly summarized:—

1. Economies due to handling goods on a large scale, both in buying and selling.

2. The elimination of multitudes of nonproductive middlemen.

3. Protection against adulteration and inferior articles and implements.

4. A more intelligent study of market conditions and arrangements.

5. Co-operation develops responsibility in private and public life, makes for education in good citizenship, and trains men to act with prudence.

6. Co-operation produces a more cohesive rural social life.

In a powerful plea for the establishment of the rural community, George W. Russell, Editor of the *Irish Homestead*, declared to the American Commission at the Plunkett House, Dublin, July 15, 1913:

"If this ideal of the organized rural community is accepted there will be difficulties, of course, and enemies to be encountered. The agricultural middleman is doubtless as powerful a person on the American continent as he is in this little island. He will rage furiously—he will organize all his forces to keep the farmers in subjection, and to retain his peculiar functions of fleecing the farmer as producer and the general public as consumers. Unless you are determined to eliminate the middleman in agriculture, you will fail to effect anything worth while attempting. I would lay down certain fundamental propositions which, I think, should be accepted without reserve as a basis of reform. First, that the farmers must be organized to have *complete* control over all the business connected with their industry. Dual control is intolerable. Agriculture will never be in a satisfactory condition if the farmer is relegated to the position of a manual worker on his land; if he is denied the right of a manufacturer to buy the raw materials of his industry on trade terms; if other people are to deal with his raw materials, his milk, cream, fruit, vegetables, live stock, grain and other produce; and if these capitalist middle agencies are to manufacture the farmers' raw material into butter, bacon, or whatever else; are to do all the marketing and export, paying farmers what they please on the one hand and charging the public as much as they can on the other hand. The existence of these middle agencies is responsible for a large proportion of the increased cost of living, which is the most acute problem of modern industrial communities. They have too much power over the farmer and are too expensive a luxury for the consumer. It would be very unbusinesslike for any country to contemplate the permanence in national life of a class whose personal interests are always leading them to fleece both the producer and consumer alike. So the first fundamental idea for reformers to get into their minds is that farmers, through their own co-operative organizations, must control the entire business connected with agriculture. There will not be so much objection to co-operative sale as to co-operative purchase by the farmers; but one is as necessary as the other. You must bear in mind, what is too often forgotten, that farmers are manufacturers, and as such are entitled to buy the raw materials for their industry at wholesale prices. Every other manufacturer in the world gets trade terms when he buys. Those who buy, not to consume, but to manufacture and sell again, get their requirements at wholesale terms in every country in the world. If a publisher of books is approached by a bookseller he gives that book-



seller trade terms because he buys to sell again. If you or I, as private individuals, want one of those books we pay the full retail price. Even the cobbler, the carpenter, the solitary artist get trade terms. The farmer, who is as much a manufacturer as the ship-builder, or the factory proprietor, is as much entitled to trade terms when he buys the raw materials for his industry. His seeds, fertilizers, ploughs, implements, cake, feeding stuffs are the raw materials of his industry, which he uses to produce wheat, beef, mutton, pork, or whatever else, and, in my opinion, there should be no differentiation between the farmer when he buys and any other manufacturer. Is it any wonder that agriculture decays in countries where the farmers are expected to buy at retail prices and sell at wholesale prices? You must not, to save a row, sell the rights of farmers. The second proposition I lay down is that this necessary organization work among the farmers must be carried on by an organizing body which is entirely controlled by those interested in agriculture—farmers and their friends."

## 2.—THE FOSTERING OF FINANCIAL INSTITUTIONS OF OUR OWN.

The following features are characteristic of financial institutions which at present exist within the province: Features of existing institutions.

1. With two or three unimportant exceptions they are not controlled within the province.
2. Being associations of lenders whose primary object is to secure profits, their interests in the final analysis are different from those of the borrowers.
3. The extremely low rate of interest allowed on deposits does not afford an inducement for people to save or to invest.
4. The great bulk of the funds used within the province is derived from sources outside the province.
5. The same institutions do not furnish mortgage and personal credit.

The following features should be characteristic of those financial institutions, the primary object of which is public service:— Features to be sought.

1. They should be controlled within the province.
2. They should seek to serve both borrowers and lenders alike. Associations of borrowers grouped together to furnish the most ample security and who stand collectively liable, would have as their first duty to keep the lenders safe and as their primary object to secure credit cheaply.
3. Profits should be reduced to a minimum, only sufficient to cover expenses of administration and to build up the necessary reserve fund.
4. They should allow sufficient interest on deposits to encourage thrift and to induce people to invest safely.
5. Though for a considerable time in the future the great bulk of the funds used within the province must be derived from sources outside the province, they should constantly aim to place the financial resources of our districts and our province, however meagre to begin with, primarily at the services of these districts and this province.



6. Though different institutions furnish mortgage and personal credit they should operate harmoniously and sympathetically.

Security the  
essential.

To embody these principles in an institution in this province is not impossible if regard be had to existing conditions and the laws of natural growth. In work of this nature we must hasten slowly, but we must hasten for even now debt is clinging like a millstone to the neck of many a homesteader and farmer on the prairie. Those who expect the touch of Midas will be disappointed. If we would build for the future we must build wisely. In the world of finance the corner stone is ever the same—security. The first and greatest commandment must be to avoid risk. They greatly err, who, in their search for cheap money, seek only London and the marts of the world. The world of finance is like the Kingdom of Heaven. The beginning is within and at home. The only basis for cheap credit is the security that cannot be questioned. Without that the farmers of this province cannot secure money at favourable rates; with that they can challenge the money markets of the world.

Collective  
liability.

To begin at the bottom. It is clear that the individual farmer needs money to bring forth the productive qualities of his land, but he cannot of himself offer a security that will attract investors at home and abroad. He can, however, become the unit cell of a vast system. He can go to his neighbours and say, "At present the lender is in a position to dictate terms to borrowers. This can be reversed if we only safeguard the rights of the lender and recognize that the interests of both borrower and lender are the same. Let us stand together in this matter—let us be responsible for each other. The property we pledge will be more than sufficient to discharge the obligations we incur. But we must remember that we are offering a commodity for sale—credit security, and to obtain what we desire we must offer a quality that is unquestioned. Should one of us fail, the rest must stand in the breach. The very acceptance of a loan means the acceptance of an obligation to meet the annual instalment of interest and principal promptly. If we accept a loan of say \$1,000 we must be liable not only for that amount but also for an additional amount, say \$500, to cover a contingent loss either through the default of a fellow member or through any other cause. Before this collective liability could operate to our individual disadvantage, the assets of that member who was responsible for the loss must first be taken. But as a loan could be, say only 40 per cent of the valuation of his property pledged, the probability of calling on us individually would be very small. In any case we are safeguarded in two ways. We shall admit to our group only those in whose integrity we can place the most ample confidence; and we shall approve of only those loans which we believe are for productive purposes and are calculated to leave the borrower in better shape after he received the loan than he was in before."

Proposed plan  
outlined.

Here is the nucleus of our system—a local group of members jointly and severally liable for each other's debt, and as a group, in due proportion with other similar groups responsible for the whole association. While those local groups are springing into existence in various parts of the province and are waiting to be approved and registered by a central commission, this commission should be

at work organizing, directing and inspiring. ' Though in the meantime appointed by the government, which, as we shall see, in the early stages of this enterprise, has much at stake, it should ultimately be entirely chosen by representatives of these local groups. As soon as adequate machinery has been devised and some measure of success attained, the government should proceed gradually to efface itself and to allow the institution to proceed upon practically an independent career.

The central commission should be the controlling force. It should not be too large, else it will be cumbersome. It should represent the locals but at the same time regulate their actions. As it must represent the institution before the outside world, and especially in the money markets, it should have the final voice in the acceptance of all loans, having the power to veto those approved by the locals but not the power to approve those vetoed by the locals. To keep this central commission in close and intimate sympathy with the whole rural constituency, there should be brought into existence another and larger body whose chief function should be advisory. Of this advisory board a part should be chosen by the annual general meeting of the association and the remainder might represent the Grain Growers' Association, the Convention of Agricultural Societies, the Union of Rural Municipalities, the Provincial Winter Fair Board, the University of Saskatchewan, and, perhaps, in the course of time, the agricultural co-operative societies of the province.

Money should be raised by mortgage bonds, issued in small denominations, payable to bearer and bearing interest. They should be issued not against individual properties but against the total aggregate of properties pledged and to an amount not exceeding the aggregate of the loans advanced. Loans should be granted only for approved agricultural productive or improvement purposes, and care should be taken either by recalling the loan or in some other way, that the borrower adheres to the purpose for which the loan is granted. It is, of course, to be expected that neighbours, who are responsible in the event of a fellow member's default, will keep a sharp eye on his use of that for which they too are liable. The loans should cover a period of years, say from fifteen to thirty-five, and should be repaid in equal payments covering both interest and principal. Provision should, however, be made whereby a borrower might repay at an earlier date if he felt so inclined.

The aim should be to render credit cheap, not to secure profits. The borrower should be required to meet all legitimate expenses and provide for the perpetuation of the association by the creation of a reserve fund. The reserve fund should increase indefinitely and serve as a guarantee against loss.

Individuals and locals should remember that promptness is the quickest way to establish a reputation for security. Locals should, therefore, see that all obligations are met at due date. As we have already indicated, this is accomplished in Germany in a rather drastic manner.

Better credit facilities can be provided. We desire to place the emphasis upon the word "better," for it is better credit rather than more credit that the farmers of this province need. Investigation indicates this clearly and the evidence of the farmers themselves

confirms it strongly. But to secure that better credit it is not enough to assail existing institutions. A constructive policy is essential. The conviction of the Commission after careful study is that the sober-minded farmers of this province realize thoroughly that the prime requisite in a progressive and constructive programme that will yield better credit is to provide security unquestioned and indisputable; security that is adequate, and, one might almost add, superfluous and unnecessary. But the thoughtful farmer who has addressed himself to these problems knows that in this matter no security should be regarded by the borrower as superfluous and unnecessary. He understands that it is just that precise factor in his security which his neighbour styles "unnecessary," which will render his mortgage bonds readily saleable at reasonable rates. It is in this way that from being a mendicant for credit he becomes a merchant of security. The lender will seek him out, if the security he offers is, as Cæsar's wife should be, above suspicion; and in the scheme which this Commission suggests the security which the farmer will offer will be beyond reproach. Every mortgage bond will be secured, even after the period of government guarantee has expired, by the following provisions:—

Abundant  
security  
necessary.

Safeguards behind  
proposed mort-  
gage bonds.

1. The aggregate of the bonds issued may not exceed the total amount of the mortgages placed.
2. Mortgages will not be granted beyond a certain proportion of the value of the land estimated with the utmost care.
3. The amount of debt will be constantly reduced by amortization.
4. The restriction of the loan to productive or improvement purposes will operate constantly to increase the value of the security.
5. The total amount of a perpetually increasing reserve fund, and all the property of the association, will be liable for all claims.
6. In the final analysis the borrowers are collectively liable to an amount 50 per cent greater than the total amount of their loans to meet the claims of bondholders.

Difficulties  
discussed.

Arising out of this sketch of our projected co-operative mortgage association, some difficulties immediately present themselves:

1. Who is to bear the expense of organization?

The Provincial Government may reasonably be expected to bear the cost of initial organization and, as well, the salary, during a period of say three years of that commissioner whom it designates managing commissioner.

2. What is likely to be the farmer's attitude towards the principle of collective liability?

This principle was thoroughly explained to the farmers of the province at the meetings of the Commission and was almost invariably heartily indorsed. It is a much more favourable arrangement than the ordinary partnership or the present system of store and implement credit, under which the merchant or dealer has to collect from those who pay the debts of those who will fail to pay; and in the co-operative

purchase of binder twine it has already been tried with marked success in many districts of the province.

### 3. Where is the money to be obtained?

(a) *Sources within the Province.*—In any scheme, that seeks to be permanent, provision should be made for an increasing use of local funds. By the sale of interest bearing bonds within the province, the resources of our own people are made available in the first instance for our own local needs. A growing number will welcome the opportunity to invest in bonds that yield a higher rate of interest than savings deposits, and at the same time are easily negotiable within the province.

It is exceedingly difficult to form an accurate estimate of the amounts that might be available for investment or even for deposit within the province. At the present time, as the following table indicates, only about one-third of 1 per cent of the balances in the Post Office Savings Bank of the Dominion comes from Saskatchewan:

*Statement of Balances in Post Office Savings Bank, Month by Month.* Savings bank deposits.

	Canada.	Saskatchewan.
<i>1911.</i>		
September. . . . .	\$43,259,218	\$123,378
October. . . . .	43,159,291	123,307
November. . . . .	43,051,991	118,666
December. . . . .	43,022,772	119,526
<i>1912.</i>		
January. . . . .	42,962,553	118,409
February. . . . .	42,769,594	116,397
March. . . . .	43,563,764	111,133
April. . . . .	43,104,213	111,184
May. . . . .	42,792,297	114,613
June. . . . .	42,683,232	116,666
July. . . . .	42,696,793	121,366
August. . . . .	42,726,347	127,271
September. . . . .	42,661,908	132,928
October. . . . .	42,406,934	130,914
November. . . . .	42,174,667	122,666
December. . . . .	42,034,988	117,879
<i>1913.</i>		
January. . . . .	41,963,040	113,378
February. . . . .	41,751,241	112,020
March. . . . .	42,728,941	113,964
April. . . . .	42,189,244	116,170
May. . . . .	41,938,210	120,321
June. . . . .	41,885,255	124,763
July. . . . .	42,027,632	127,519
August. . . . .	42,125,880	131,152

Information as to amounts on deposit in Saskatchewan was supplied by the general managers of only two of the chartered banks doing business in the province, and is therefore too incomplete to be of any value.



(b) *Sources outside the Province.*—For a considerable time to come the larger bulk of the funds required must inevitably come from sources outside the province. Until the association has established its reputation it must offer a security that is known to the investing public. To begin with, it must be remembered, the association possesses practically no assets, and, so far as the investing public abroad is concerned, no financial standing. Large mortgage corporations which float mortgage bonds abroad possess both. To serve in their place the association must secure one or both of the two following privileges:—

1. The guarantee of the provincial government.

This would be required only temporarily, till the association had established its reputation. Should this be employed, as seems likely to be necessary, it is proper that the amount of the government guaranteed bonds should be determined annually by agreement between the government and the association.

2. The inclusion of these mortgage bonds in the British trustee list.

For the regulation of the investment of trust funds the Lords Commissioners of the British Treasury have approved certain investments and laid down certain conditions. The trustee list includes the securities of the overseas Dominions, India and certain Crown colonies.

The following are the conditions:—

1. The colony shall provide by legislation for the payment out of the revenues of the colony of any sums which may become payable to stockholders under any judgment, decree, rule or order of a court in the United Kingdom.

2. The colony shall satisfy the Treasury that adequate funds (as and when required) will be made available in the United Kingdom to meet any such judgment, decree, rule or order.

3. The colonial government shall place on record a formal expression of their opinion, that any colonial legislation which appears to the Imperial Government to alter any of the provisions affecting the stock to the injury of the stockholders, or to involve a departure from the original contract in regard to stock, would properly be disallowed.

The securities of the Dominion of Canada have access to this list. So, also, have those of the various Australian States, Natal, the Cape of Good Hope, New Zealand, Newfoundland and India. The Australian States secured admission before they were constituted a commonwealth, while they were still individually in the colonial relation to Great Britain. This privilege the Province of Saskatchewan never possessed. Nor under clause 3 can our securities qualify for admission, for our constitutional arrangements do not contemplate bringing our provincial legislation directly under the purview of the Imperial Government. Yet the injustice of according our securities an inferior status to those of Hong Kong seems evident. So far representations have proved unavailing.

Government  
guarantee  
required.

Trustee list.



Mr. Henry Wolff, the eminent authority on co-operative banking, writes: "Why should not colonial land bonds be gladly accepted as good investments in Great Britain? It all depends upon the system upon which they are issued, and the safeguards observed to make sure that they represent good value.\* \* \* Once land bonds could be made to find a market in the old country—which it is only reasonable to presume that they would—capital, which is, in the colonies, largely wanted for purposes of development, might be attracted in substantial sums from the United Kingdom."

#### OTHER SOURCES.

(a) *On the Continent.*—The market for co-operative mortgage bonds on the continent at present must be acknowledged to be problematical. Such bonds from Denmark do find a ready market in Germany and are issued contemporaneously in Hamburg and Copenhagen. Saxon bonds sell throughout the German Empire. But these are rather the exceptions. In some cases the boast, in others the complaint, is that these bonds sell at home where the security is best known. It can reasonably be expected that the sale of a Saskatchewan co-operative mortgage bond on the continental market belongs rather to the future than to the present.

Mortgage bonds on continent.

(b) *In Canada.*—Apart from direct investment in mortgage bonds, which, it can be anticipated, if the rate of interest be sufficient, will take place on an increasing scale throughout the Dominion, it may be well to enumerate briefly the various funds, which, either themselves or those corresponding to them, are in other countries devoted to this purpose.

Funds in Canada.

1. Post office savings funds. (August, 1913, \$42,125,880.)
2. Proportion of profits accruing to banks as a result of their privilege of issue.
3. Annuities funds.
4. Direct grant from national government.
5. Government savings bank funds.
4. How is personal credit to be provided?

Experience shows that mortgage business is different from banking business. But because the two branches of business are distinct is no reason why they should not be sympathetic. To secure this sympathy two features should be embodied in their relationship:

(a) Those who direct the policy of one should direct the policy of the other as well. The scheme of the interlocking directorates, which has operated to the disadvantage of the public, can be made to work for the public benefit.

(b) That policy should be in the interests of the borrowing community.

It is expedient, therefore, that the co-operative mortgage association, which is an association of borrowers, should itself establish a sister but independent institution to transact a regular banking business. The majority stock of this bank should be held by the Association should aim to establish bank.

mortgage association, and the balance sold to agriculturists within the province. The provincial government should at the same time of the establishment of this bank render such assistance as will enable the association to control the bank in the interests of the agricultural industry.

**Bank's relation to association.**

The bank should open branches in such centres as from a banking point of view would be proper, and grant to locals of the mortgage association lines of credit for personal loans to its members. The officers of these locals should act as receiving agents for deposits for the bank, and, subject to the instructions of the bank, apply those deposits to personal loans up to the limit of the line of credit granted to the local by the bank. In this way the funds of every community would be available in the first instance for the needs of that community and the expense of transmitting funds would be reduced to a minimum. The various public and semi-public institutions of the province should be encouraged to transact their banking business with this bank. The profits might be devoted to two objects:

(a) To spread the activities of the bank throughout the province.

(b) After the bank is well established their proportion of the profits should be handed over to the agriculturist shareholders. The portion paid to the mortgage association might be devoted to:

1. The building up of a reserve fund.

2. The paying of amortization instalments of outstanding debts.

Nor should it be forgotten that no small part of the function of this bank should be to raise the rate of interest on deposits and thus to secure to those who have funds to deposit a more reasonable return for their money.

**5. Is the solution offered adequate or final.**

**A nation-wide issue.**

The Commission would particularly insist that the solution which it offers is a solution *in the light of existing conditions*, one that is practicable and calculated to afford relief. The system proposed possesses within itself elements of permanence and a capacity for expansion and growth. But the Commission would be lacking in candour did it fail to reiterate a conviction to which it gave expression in the introduction to this report: "Agricultural Credit is a problem which cannot be solved by one borrower or one community and perhaps not even satisfactorily by one province." This is a nation-wide issue demanding a nation-wide policy. The adoption of Raiffeisen or Schulze-Delitzsch or other neighbourhood societies may not be immediately practicable, but these societies contain the germ of a tremendous principle within their constitution, the principle of local cohesion. Through them, local resources are allowed to exert their fructifying influences. They stand upon a solid basis of security, the security of mutual confidence and control.

In Europe these neighbourhood banks are through central organizations intimately associated with the banks of issue and serve for them as a species of gauge or financial thermometer. More significance is attached to the resources and needs of the local communi-

ties, the security at the base, than to the arbitrary, if honest policy of the director at the top. In Canada we pride ourselves on our centralized system of banking. In the face of severest criticism it does not stand condemned. It has a function to perform, and, on the whole, it has performed it fairly well. But it is not suited to the producing agriculturist. It is not calculated to respond to local needs and local sympathies. Present banking system enadequate.

In Quebec co-operative banks have been introduced. But conditions in Quebec are more like those in Europe than are conditions in any other part of the Dominion. It will be long before Saskatchewan resembles either Quebec or Europe. And yet these neighbourhood banks established on co-operative principles are the ultimate goal. They furnish the farmer the open account. They place agriculture upon a business basis. But they are possible only under two conditions:

1. When the funds of the neighbourhood tend to be sufficient for the economic needs of that community.

2. When the resources of the local community are supplemented by resources put at the disposal of that community by some strong central body.

In Europe this assistance comes from banks of issue, savings banks or governmental sources. In our country this should come from postal savings, the profits on note issues or the Dominion Government. It is a nation-wide issue, to supplement, not to supplant our banking facilities in the interests of agricultural credit. The solution offered by this commission is practicable. It will endure. But it does not solve the whole question of rural finance. That is a problem for the whole Dominion. Dominion must act.

## CHAPTER X.—RECOMMENDATIONS.

1. That, inasmuch as in the experience of older communities cheaper agricultural credit is invariably associated intimately with other phases of agricultural co-operation, such additional legislation be enacted by the legislature and information and guidance provided by the government as will further facilitate on the part of the farmers of the province the establishment upon a sound basis of a system of local and central rural co-operative societies for purchasing and selling farm products and supplies. Co-operation should be fostered.

2. That legislation be enacted to provide for the establishment of a co-operative mortgage association for the raising of funds on mortgage bonds and the granting of loans to farmers on mortgage security for approved agricultural productive or improvement purposes only; such legislation to embody the features hereinafter mentioned. Mortgage association should be formed.

3. That the association be known as the Saskatchewan Co-operative Farm Mortgage Association and consist of a central commission, an advisory board, local associations, individual members and an annual general meeting. Its constituent parts.

4. That the central commission consist of at least three members clothed with the necessary authority as the executive body of the association; Central commission.

(a) At the outset the government to appoint all members;

(b) One of the members to devote his whole time to the work of the association as managing commissioner and to be the only salaried member of the commission;

(c) As the association acquires financial standing and is able to dispense with the provincial guarantee in the marketing of its securities, the selection of commissioners to be gradually transferred to the association acting through its annual general meeting.

**Advisory Board.**

5. That an advisory board of fifteen members be created to act in an advisory capacity in relation to the commission; the members to be appointed part by the association acting through its annual general meeting and the remainder by such organizations and institutions in the province as exist to promote agricultural betterment.

**Conditions of membership.**

6. That the individual members be borrowers admitted by vote of the local association into its membership, approved mutually and by the central commission and who have paid the initial entrance fee of \$10.

**Local association—how formed.**

7. That each local association consist of at least ten members with a combined mortgage loan of at least \$5,000, united on the basis of joint and several liability, formed by mutual consent and with each member approved by the central commission.

**Annual general meeting.**

8. That the annual general meeting consist of representatives, one from each local association.

**When summoned.**

9. That the first general meeting be not summoned and loans to individuals be not made until at least twenty-five local associations have been formed as provided in section seven by the central commission.

**Members liability.**

10. That the liability of the individual member, whether as member of the local association or as member of the Saskatchewan Co-operative Farm Mortgage Association, in respect of any obligation incurred or losses suffered or in any other respect whatever, be limited to an amount not more than fifty per cent greater than the amount of his loan.

**Liability of local association.**

11. That the liability of the several local associations to the Saskatchewan Co-operative Farm Mortgage Association being the ratio of the aggregates of the mortgage loans of the members composing such associations.

**Loans on amortization plan.**

12. That all mortgage loans be issued on an amortization basis to cover a period of not less than fifteen, and not more than thirty-five years, with the option reserved to the borrower, upon three months' notice being given or a bonus of three months' interest being paid, of paying the whole or any part of the balance due in excess of the stipulated payment on any regular day of payment before the final; always provided that payments in excess of the regular payment shall not release the borrower from his obligation to meet promptly his subsequent consecutive annual payments until the amount of his indebtedness has been discharged.

**Securing funds.**

13. That the funds required by the association for loans to its members be raised on mortgage bonds issued by the association and fully guaranteed by the provincial government, the amount of such



government guaranteed bonds to be determined annually by agreement between the provincial government and the association.

14. That the association advance its funds to the borrower at a rate of interest which will include only the cost to the association of the money itself, the expenses of administration and provision for the creation of a reserve fund to provide such security and guarantee for the future issue of mortgage bonds as will in the course of time render government guarantees unnecessary and place the association upon a purely self-supporting basis. Rate of interest—no profit.

15. That loans be limited to 40 per cent of the central commission's valuation of the property to be mortgaged. Limit of loans.

16. That the provincial government make a grant of not less than \$10,000 towards the expense of organizing the Saskatchewan Co-operative Farm Mortgage Association and also pay the salary of the managing commissioner for at least three years. Government grant for organization.

17. That the Saskatchewan Co-operative Farm Mortgage Association establish as soon after its foundation as is feasible a bank with headquarters within the province to conduct a regular banking business both through branches of its own and, wherever possible, with and through the locals and officers of the association: Bank for personal credit.

(a) Such assistance to be rendered by the provincial government at the time of the establishment of such bank as will enable the Saskatchewan Co-operative Farm Mortgage Association to control it in the interests of the agricultural industry.

18. That the schedule of land titles fees be so revised that, while not yielding any less revenue to the provincial treasury or causing specific services to be performed at a loss, they shall bear less heavily upon the homesteader whose land is encumbered at the time of the issuance of the patent therefor. Land titles fees.

19. That the representations which for some time past have been made by the government be continued through the proper channels to the Lords Commissioners of the British Treasury to include the securities of the Province of Saskatchewan and securities guaranteed by the provincial government in the British trustee list. Trustee list.

20. That the provincial university be asked to furnish either by regular classes or through its extension department or otherwise such instruction as will provide a knowledge of accounting methods and disseminate throughout the province an adequate acquaintance with co-operative principles. Training accountants.

All of which is respectfully submitted.

J. H. HASLAM, *Chairman.*

CHAS. A. DUNNING,

EDMUND H. OLIVER.



APPENDIX No. 32.

CREDIT.

(*Monthly Bulletin of Economic and Social Intelligence, October, 1914.*)

WORK OF THE SPECIAL AGRICULTURAL CREDIT INSTITUTES IN 1913.

Sources: Banco Di Napoli, Cassa Di Risparmio, Credito Agrario. Relazione sull'esercizio 1913. (Bank of Naples, Savings Bank, Land Credit Department. Report for the year 1913.) Naples, 1914. Banco di Sicilia, Rendiconto del Consiglio d'Amministrazione sul servizio del credito agrario e bilancio consuntivo, esercizio 1913. (Bank of Sicily, Report of the Board of Management on the Agricultural Credit Service and Balance Sheets for 1913.) Palermo, A. Giannitrapani, 1914.

In this article we intend to give a short account of the work done in 1913 by the special Agricultural Credit Institutes, that is to say, by the institutes, for the most part regional in character, authorized by special laws for this class of credit work. The most important of these laws are those of July 7, 1901, authorizing the Savings Bank of the Bank of Naples to do agricultural credit business in the provinces of Southern Italy and the Island of Sardinia, and of March 29, 1906, instituting a department at the Bank of Sicily for the grant of agricultural credit. We may also mention the laws of December 21, 1902, March 31, 1904, and June 25, 1906, respectively for credit in Latium, Basilicata, Calabria, etc.

The fundamental principle of this legislation is the distribution of credit to farmers, not directly, but through local institutes, preferably through those of co-operative form (rural and agricultural banks, agricultural consortiums, etc.), therefore styled intermediary organizations.

Exception is only made for those communes that have no local institutions or none inspiring confidence or activity working: in these, loans may be granted to the farmers directly.

The agricultural credit institutes, consequently, carry on an active propaganda in favour of the foundation of intermediary organizations and strive to ensure their good working by means of the distribution of model rules, instruction in bookkeeping and inspections. Besides this, in order the better to attain this end, the Department of Agriculture, in accordance with the above laws, every year opens prize competitions among the co-operative societies. The agricultural banks, large numbers of which have been lately founded in the south and in the Islands, of the same legal character and economic form as the rural banks, owe their origin to the special agricultural credit laws above referred to.

51.—THE SAVINGS BANK OF THE BANK OF NAPLES AND THE AGRICULTURAL CREDIT DEPARTMENT AT THE BANK OF SICILY.

The agricultural credit business done by the two Southern Banks appreciably increased in 1913, as is seen from the following figures:

Years.	Bank of Naples. frs.	Bank of Sicily. frs.
1908. . . . .	4,823,440	2,192,298
1909. . . . .	5,390,203	4,061,269
1910. . . . .	7,830,401	7,119,720
1911. . . . .	9,654,213	9,137,972
1912. . . . .	9,353,833	12,039,391
1913. . . . .	13,034,341	15,628,632

The advance is especially observable in the case of the Bank of Sicily: Sicilian agriculture finds in this large increase of capital no inconsiderable assistance in its economic and technical development, which also stimulates the various forms of agricultural co-operation.

Passing on to a more detailed consideration of the work done by the two banks in 1913, we find in the first place that the number of the intermediary institutes of the Bank of Naples continues to increase; and indeed from 1,750 in 1911 they increased to 1,855 in 1912 and 1,963 in 1913; however, the number of these considered "good," which, that is to say, may be depended upon for credit, only increased in the above three years from 868 first to 938 and then to 1,044; the increase in 1913 was almost entirely among the agricultural banks; of the 1,044 good institutes, 133 (amongst them 124 people's banks) also are accredited to the Bank for purposes of ordinary discount business.

The good institutes are divided as follows: Agricultural and rural banks, 313; Sardinian monti frumentari, 288; people's banks, 160; agricultural consortiums, 126; agricultural loan banks, 115; savings banks, 16; mutual aid societies, 9; monti frumentari, 8; independent provincial agricultural credit banks, 6; agricultural credit societies, 3.

But only some of the good institutes are entered on the agricultural register; at the end of 1913, 633 were so registered for an amount of 22,933,600 frs. (Amongst these 150 people's banks for 7,183,000 frs., 87 agricultural consortiums for 6,676,500 frs., and 199 agricultural and rural banks for 6,083,000 frs.)

The operations conducted by the Bank of Naples in 1913, not including renewals, amounted to 13,034,341 frs.: 5,857,385 frs. provided out of its own funds, and 7,176,955 frs. out of the funds of the provincial banks. Altogether its rediscount transactions amounted to 10,347,107 frs.; it made direct loans to the amount of 865,646 frs., and directly discounted bills to the amount of 1,821,588 frs.

The total amount of the business done in the twelve years exceeds 60,000,000 frs., of which about 36,000,000 frs. was done through agricultural consortiums and 12,000,000 frs. through agricultural banks. The total bills and acceptances at the end of 1913 amounted to 7,884,069 frs.

Last year, both for its own business and for that of the provincial banks, the savings bank of the Bank of Naples maintained the rate of interest of  $3\frac{1}{2}$  per cent on operations (for rediscounting and direct discounting) with the intermediate institutes, and 4 per cent on loans granted directly to farmers; the intermediary institutes, in their turn, lent at rates varying from  $3\frac{1}{2}$  to 6 per cent, and for the most part at 5 and  $5\frac{1}{2}$  per cent.

According to the object of the loans, the credits in kind granted to the farmers by means of rediscount operations and direct loans were distributed as follows:

#### 1.—Loans with Legal Preference.

	No.	Frs.
For harvest. . . . .	616	366,771.60
" cultivation. . . . .	6,281	2,272,524.39
" seeds. . . . .	2,653	1,262,312.73
" manure. . . . .	3,230	560,028.44
" anticryptogamic mat'l. . . . .	2,424	325,790.19
" food for metayers. . . . .	26	5,614.50
" various purposes. . . . .	2,115	1,064,846.08
	<hr/> 17,345	<hr/> 5,862,887.93

2.—Loans without Preference.

	No.	Frs.
For large livestock.. . . .	3,339	1,096,351.98
“ small livestock.. . . .	492	163,312.60
“ machinery.. . . .	479	167,933.48
“ farm implements.. . . .	214	26,463.07
“ dead stock.. . . .	97	31,051.80
“ various purposes.. . . .	38	30,915.80
	4,659	2,516,028.72

3.—Loans with Preference by Agreement.

For large livestock.. . . .	5	10,000.00
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4.—Loans on Deposit of Agricultural Produce.

On cereals.. . . .	310	2,749,235.80
“ wine.. . . .	15	70,600.00
“ oil.. . . .	1	4,000.00
	326	2,823,855.80

The loans with legal preference represent 52.29 per cent of the total credit granted to the farmers; those without preference, 22.43 per cent; those with preference by agreement, 0.09 per cent; and those on deposit of agricultural produce, 25.19 per cent.

Of the loans, 13,409 for 5,421,851 frs. (48.35 per cent) were granted to proprietors working their own farms; 299 for 65,633 frs. (0.59 per cent) to tenants on long lease; 329 for 158,409 frs. (1.41 per cent) to metayers or tenants paying rent partly in kind, and 8,298 for 55,566,860 frs. (49.65 per cent) to tenant farmers.

The direct discount given was in 191 cases on 1,382,570 frs. for collective purchases; in 10 cases on 332,280 frs. for collective sales, and in 33 cases on 106,738 frs. to make up the capital of the intermediary organizations; almost all on the proposal of agricultural consortiums and land banks.

The total credit granted out of the funds of the Savings Bank of the Bank of Naples and the Provincial Banks was distributed as follows among the various provinces:—

Provinces.	Amount—Frs.
Foggia.. . . .	4,808,790.68
Aquila.. . . .	1,676,977.78
Bari.. . . .	1,152,495.11
Sassari.. . . .	1,000,123.78
Caserta.. . . .	866,144.85
Lecce.. . . .	655,240.99
Teramo.. . . .	558,772.92
Reggio.. . . .	431,960.00
Catanzaro.. . . .	302,090.00
Salerno.. . . .	283,871.07
Potenza.. . . .	261,738.43
Cagliari.. . . .	258,006.05
Campobasso.. . . .	246,751.34
Naples.. . . .	196,706.26
Chieti.. . . .	108,335.51
Benevento.. . . .	106,896.50
Cosenza.. . . .	70,745.00
Avellino.. . . .	48,694.35
Total.. . . .	13,034,340.62

The intermediate organizations accredited to the Bank of Sicily increased in number in 1913 from 275 to 323.<sup>1</sup> This large increase is due to the active propaganda of the Institute; the large majority (255) are societies of collective title; 303 institutes have the form of co-operative societies, and of these 130 are agricultural co-operative societies for production and labour. The entries in the agricultural register increased in 1913 from 14,882,000 frs. on December 31, 1912, to 17,880,218 frs. on December 31 of the ensuing year.

The work of the bank shows a new and magnificent advance: 48,712 operations were conducted for the amount of 15,628,632 francs; with the increase of the intermediate organizations, the amount of the operations conducted with private individuals, once so important, has been reduced to an inconsiderable minimum (51 operations, for 8,475 francs); those conducted with intermediate institutes were 48,661 for an amount of 15,620,157 (rediscount operations to the amount of 13,374,781, and direct discount operations to that of 2,245,376 francs).

The direct and indirect loans may be classified as follows in relation to their object:

	Number. Operations.	Amount. Frs.
I. For seeds, manure, anticryptogamic substances, cultivation and harvesting.. . . .	46,122	12,127,996
II. For live stock.. . . .	2,175	1,212,305
" machinery.. . . .	37	37,750
" farm implements.. . . .	1	3,000
" dead stock.. . . .	5	1,625
III. For direct discount to the intermediate organizations, for distribution to members.. . .	144	720,871
For collective purchases.. . . .	130	783,161
" payment of charges.. . . .	71	582,280
" advances on produce.. . . .	26	159,063

As regards the condition of the borrowers, the operation may be divided as follows:—

	Operations Number	Amount frs.
Land holders.. . . .	20,499	6,205,593
Tenants on long lease.... . . .	1,123	328,293
Metayers.. . . .	1,876	433,796
Tenant farmers.. . . .	24,843	6,415,571

1. The number of the members of the intermediate organizations of the Bank of Sicily on December 31, 1913, was 50,178; the capital of the members with unlimited liability was 223,145,847 frs., and the capital of the institutes themselves 3,707,158 frs.

The various provinces shared as follows in the total amount of credit granted in 1913:—

Provinces.	Amount, frs.
Caltanissetta.. . . .	3,074,153.45
Palermo.. . . .	2,800,822.71
Trapani.. . . .	2,776,627.12
Girgenti.. . . .	2,206,509.95
Caltagirone.. . . .	1,752,162.91
Syracuse.. . . .	1,592,745.07
Catania.. . . .	956,710.54
Messina.. . . .	368,800.96

Total.. . . . 15,628,631.71

<sup>1</sup> Riccardo Bachi's Annual "L'Italia Economica."

The interest charged on loans by the Agricultural Credit Department of the Bank of Sicily in 1913 was 4 per cent; that demanded from their members by the intermediary organizations was generally 6 per cent.

52.—OTHER SPECIAL AGRICULTURAL CREDIT INSTITUTES.

The figures for the operations conducted in 1913 by the other special agricultural credit institutes working in Italy are shown in the following table.<sup>1</sup> In order to make it more complete, we have included also those given above for the Banks of Naples and Sicily.

In 1913, therefore, the special agricultural credit institutes lent the Italian farmers about 40,000,000 frs., 9,000,000 frs. more than in 1912.

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<sup>1</sup> Riccardo Bachi's Annual "L'Italia Economica."



AGRICULTURAL CREDIT GRANTED IN 1913, IN ACCORDANCE WITH THE ITALIAN REGIONAL LAWS.

Balance at end of 1912.	Name of Institute.	Loans to Intermediate Institutes.	Loans made directly to Farmers.	Total.	Balance of Loans at end of 1913.
3,666,432 88	Bank of Naples { out of its own Funds.....	5,342,185 48	515,200 00	5,857,385 48	4,026,380 32
3,009,476 41	Bank of Naples { out of the Funds of the Provincial Banks.....	6,826,509 39	350,445 75	7,176,955 14	3,859,378 95
4,593,195 34	Bank of Sicily { out of its own Funds.....	10,300,084 54	1,000 00	10,301,084 54	6,729,837 58
3,604,402 53	Bank of Sicily { out of the Funds of the Provincial Banks.....	5,320,072 17	7,475 00	5,327,547 17	3,913,561 45
2,508,666 94	Agricultural Credit Institute for Latium Credit.....	4,942,122 96	633,342 15	5,575,465 11	2,237,723 47
2,375,872 50	Vittorio Emanuele III Agric. Credit Institute—Catanzaro.....	13,000 00	255,955 00	268,955 00	348,827 50
495,333 43	Vittorio Emanuele III Agric. Institute—Cosenza.....	10,000 00	302,253 00	312,253 00	580,379 52
461,610 00	Vittorio Emanuele III Agric. Credit Institute—Reggio Calabria.....	53,000 10	313,205 00	366,205 10	548,305 00
1,115,781 06	Cagliari Adempirville Bank.....	1,889,483 34	177,531 00	2,067,014 34	2,060,892 65
2,099,214 98	Sassari Adempirville Bank.....	512,062 63	880,708 50	1,392,771 13	2,189,062 80
1,316,697 69	Agricultural Credit Provincial Bank for Basilicata.....	678,529 77	272,874 89	951,404 66	1,493,563 85
23,146,733 76	Total.....	35,886,990 28	3,909,990 29	39,796,980 57	27,987,877 09
	Total for the year 1912.....	30,417,180 71			
	Difference in favour of 1913.....	9,379,799 96			

## APPENDIX No. 33.

## FUNDAMENTAL PRINCIPLES OF CO-OPERATION IN AGRICULTURE.

By G. HAROLD POWELL.<sup>1</sup>*(University of California Agricultural Experiment Station, Circular No. 123.)*

EDITOR'S NOTE.—This circular is evidently a general concise statement of the principles of co-operation which are discussed in detail and applied to different kinds of co-operation in the author's larger work "Co-operation in Agriculture," 1912 (350 pages), reviewed in the June, 1914, number of "The Bulletin of Foreign Agricultural Intelligence," page 426.

The co-operative organization differs fundamentally from the capital stock corporation conducted for profit. A capital stock corporation for profit is organized to return an earning and a profit on the capital used in the business. The basis of administration, control and the distribution of earnings is the capital invested in the undertaking.

In a co-operative organization, the basis of control is the membership, where each votes equally irrespective of the volume of his business; though the basis of control is often made the product of the members, where each votes in proportion to the volume of business contributed while the earnings in either case, if they occur, are returned to the member in proportion to the volume of business he transacts through the organization. The basis of the co-operative organization is men; of the capital stock corporation, money. Capital cannot co-operate; products cannot co-operate; only men can co-operate. When the degree of co-operation of a member is measured by the capital or the volume of business contributed, then the members as men are not co-operating; either capital or a product is the basis of co-operation through the member as a medium.

## CONFUSION IN THE USE OF THE TERM "CO-OPERATION."

There is much confusion in the use of the term "co-operation" as applied to agricultural efforts. It is commonly applied to any group of farmers who associate themselves together. They may organize as members of a voluntary incorporated association of individuals; or an incorporated capital stock association to handle farm crops for profit or for other purposes, or as non-profit corporations without capital stock. In California, for example the term is applied to both profit and non-profit corporations organized to handle farm products, whether organized and controlled by the producers themselves, or by others. In other parts of the country, the same uncertain use of the term is applied to various kinds of agricultural movements. The term needs to be defined by the federal and state statutes. It is believed that its use as applied to business organizations in agriculture should be restricted to incorporated associations, societies, exchanges, or agencies which are formed exclusively for the benefit of the members; whose voting power is based on equality of membership; whose membership is confined exclusively to active producers, the membership ceasing to exist when the producer withdraws from the organization, and whose earnings are distributed on the basis of the product, rather than on the capital contributed by each member, after a fair rate of interest is paid for the use of capital actually employed in the business, if any, and other overhead charges are deducted. A co-operative organization, therefore, is not a corporation in which the

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capital is contributed primarily in order that it may earn a profit; nor one composed of producers and non-producers; nor one in which the producer's product is handled by a corporation for the benefit of the stockholders rather than for that of the members; nor one in which the membership is not under the control of the organization; nor one in which the members do not actually control the organization. It is an association of farmers who unite in an effort to handle their common interests through an agency which is controlled by them, on the principle of an industrial democracy, and exclusively for their benefit.

#### FORMS OF CO-OPERATIVE ASSOCIATIONS.

A co-operative association may be incorporated as a capital stock corporation or as a non-profit corporation without capital stock. If formed as a capital stock corporation it may still be legally co-operative if the laws under which it is formed permit the members to manage its affairs along co-operative lines, or if the statute provides the method of voting, the method of transferring stock, the limitation of membership and the distribution of earnings according to co-operative principles. There has been little effort by the states to enact laws that will permit the organization of purely co-operative associations of farmers. It is, therefore, impossible in most states for an association to be formed than can operate securely along co-operative principles, though as a matter of fact many associations so formed do, by the consent of the stockholders, actually operate co-operatively.

#### A STOCK CORPORATION NOT THE FORM FOR A CO-OPERATIVE ORGANIZATION.

The stock corporation as defined by the statutes of most states is not the form under which to incorporate a farmers' business organization, though most of the so-called co-operative associations have been incorporated under the stock corporation statutes. The stock corporation laws have been enacted primarily to meet the needs of capital, not primarily for the benefit of those who may use the facilities of the corporation. The membership in such organizations is not under legal control, because the right to sell the stock is a legal incident of its ownership. A stockholder may sell his farm and continue to be a stockholder in a stock corporation, and still have the right to examine the affairs of the association, or he may sell his stock to some one who is not interested in the organization, or who may even be antagonistic to it; or he may withdraw his membership and still remain a stockholder. There is no legal way by which the stock, and therefore the control of the corporation, can be confined to the membership after the stock has once been issued, unless the association is able to take over the stock and hold it as a trustee, until it can be re-sold to a member. Neither is the voting power of the stockholders under control in a stock corporation, because the voting power is generally proportional to the number of shares held by each stockholder.

As a matter of fact most of the so-called co-operative associations of the country have been incorporated as capital stock corporations in the absence of other statutes under which they could be incorporated and many of them operate by mutual agreement expressed in the articles of incorporation, or in the by-laws, on strictly co-operative principles; others vote in accordance with stock ownership, fix a maximum amount of stock to be owned by any member and apportion the stock on the bearing acreage of the members, but make no profits on capital. These organizations usually provide that a withdrawing member shall offer his stock to the association before he can sell it outside, a provision that is useless if the association is not able to take it over.

They may provide also that all the earnings shall be returned to the members prorated on the business transacted by each after interest is paid on the capital invested and other overhead charges are deducted. The stockholders may vote equally by agreement and the capital invested may be paid only a fair rate of interest for its use.

The difficulty in such organizations lies in the fact that some of the conditions to which they agree are not, in case of trouble, enforceable in the courts, and the organization ceases to be co-operative when the stockholders desire for any reason to exercise their legal privileges along non-co-operative lines.

As a result of organizing a so-called co-operative association under the usual stock corporation laws, many of these organizations often pass into the hands of non-producers or of rival interests, following the withdrawal of members through the sale of farms and the sale and transfer of stock; or a partial control may be held by dissatisfied stockholders who have withdrawn as members.

#### NON-PROFIT CORPORATIONS.

In other states, especially in California, the statute provides for the incorporation, organization, management and co-operation of agricultural, non-profit associations which do not have capital stock and whose business is not carried on for profit. These associations issue certificates of membership to each member but the membership cannot be transferred or assigned to any other person, nor is the purchaser of a property of a member entitled to membership by virtue of such purchase. In such associations the basis of voting and the control of the membership is subject to rules made by the association. These associations may accumulate a capital with which to transact business though the capital is not in the form of a paid-in capital stock. It may be accumulated pro rata from the proceeds of the shipments of the members, or in any other way agreed to by the members.

In Nebraska co-operation has been defined and given a legal status. The law says, for the purpose of this Act, the words "co-operative company, corporation, or association" are defined to mean a company, corporation or association which authorizes the distribution of its earnings in part or wholly, on the basis of, or in proportion to, the amount of property bought from or sold to members, or of labour performed, or other service rendered to the corporation. It differs from the general incorporation law of Nebraska by providing that every co-operative corporation has the power "to regulate and limit the right of stockholders to transfer their stock; and to make by-laws for the management of its affairs; and to provide for the distribution of its earnings."

In Wisconsin, a law was passed in 1911, chapter 368, laws of 1911, which provides for the formation of a "co-operative association, society, company or exchange, for the purpose of conducting agricultural, dairy, mercantile, mining, manufacturing or mechanical business on the co-operative plan." It "may buy, sell, and deal in the product of any other co-operative company heretofore organized or hereafter organized" as a co-operative association. The law provides that "no stockholder in any such association shall own shares of a greater par value than one thousand dollars . . . or be entitled to more than one vote." It provides that the directors shall apportion the earnings, subject to revision by the association at any time, "by first paying dividends on the paid-up capital stock not exceeding six per centum per annum, then setting aside not less than ten per centum of the net profits for a reserve fund until an amount has been accumulated in said reserve fund equal to thirty per centum of the paid-up stock, and five per cent thereafter for an educational fund to be used in teaching co-operation, and the remainder of said net profits by uniform dividend upon the amount of purchase of shareholders and upon the wages and salaries of employees, and one-half of such uniform dividend to non-shareholders on the account of their purchases, which may be credited to the account of such non-shareholders on account of capital stock of the association; but in productive associations such as creameries, canneries, elevators, factories, and the like, dividends shall be on raw material delivered instead of on goods purchased. In case the association is both a selling and a producing concern, the dividends may be on both raw material delivered and on goods purchased by the patrons." The law



provides that no corporation or association doing business for profit shall be entitled to the use of the term "co-operative" as part of its corporate or business name unless it has complied with the provisions of the Act.

#### FURTHER DIFFICULTIES IN THE STOCK CORPORATION FORM OF ORGANIZATION.

One of the common difficulties in a so-called co-operative association formed as a stock corporation results from the payment of dividends on the paid-in capital above a fair interest for the use of the capital, especially where the capital contributed by the members is not proportional to their individual shipments. The tendency in such organizations is to pay high dividends on the stock. The stockholders generally demand an unusual earning on the capital contributed. They acquire the dividend habit. They deduct an amount from the proceeds from the product of all members, or from the earnings of the company, to pay the dividend, before returning the proceeds to the growers. In some fruit growers' organizations, dividends of 20, 30 or even 50 per cent have been paid on the capital stock.

The difficulty over the payment of dividends usually arises with a member who is a small stockholder and at the same time a large shipper, or when a stockholder ceases to be an important shipper. A grower becomes dissatisfied when he realizes that the payment of a profit to capital, whether taken from the proceeds of his fruit, or made as an earning on his purchases, are used to enrich a stockholder who has money invested in the corporation, but who has not contributed to its success except in the original investment. Another source of trouble in the stock corporation is that the grower becomes dissatisfied after receiving a liberal dividend on his stock, if the business condition of the organization does not warrant its continued payment. In the citrus industry these difficulties have usually been avoided by paying no dividends on the capital, or at least a dividend not in excess of the customary rate of interest.

A farmers' organization that has been organized under the usual stock corporation laws, is on an uncertain foundation, not alone from the lack of control of the membership, but also because of the conflict between the capital and the product of the members whenever the proceeds derived from the latter are reduced to pay an unusual rate of interest on the capital contributed.

There are many so-called co-operative organizations (shrewdly formed) that make an earning for the corporation on the product of the grower by retaining the control of the facilities through which the growers' fruit is handled. The packing houses may be controlled by the organizers and a large dividend paid out of the proceeds of the product on the capital invested. The purchase of supplies may contribute a profit, low grade supplies may be sold at the price of high grade material, and profits may be made in many other indirect ways. An organization that pays a profit to capital from the growers' product, either from the use of packing facilities or for any other service, is not co-operative. It is a stock corporation, operating for the grower for profit on capital, while a co-operative organization is operated by the producers wholly for their own benefit, the benefits being pro-rated on the use which the member makes of the organization.

#### A CO-OPERATIVE ORGANIZATION MUST SPRING FROM NECESSITY.

A co-operative organization of farmers must be founded on economic necessity if it is to be permanently successful. The reason for its existence must lie in some vital service which it is expected to perform if it is to have strength enough to live in the face of the competition to which it will instantly be subjected. It must compete with existing organizations and this competition will be directed towards eliminating it; it will be viciously attacked; every conceivable form of misrepresentation will be levelled against it; the officers will be attacked by insidious rumours concerning their ability or integrity; the banks, especially in the newer sections,



may be controlled by competitors, and may refuse to furnish the necessary credit; and every weapon known to competition, either legitimate or disreputable, will be used to put it out of business.

The average producer is not a business man, nor is he skilled in the arts of competitive business. He is naturally a strong individualist. He is slow to delegate authority over his affairs to any one, and when he is face to face with the skilful arguments of those who aim to break the organization and keep him working as an individual, he is likely to weaken and finally leave the organization unless he had felt the effect of hard times, a helplessness arising from a combination of those who buy or sell his products, excessive freight, or commission charges or other forms of oppression. It is an historical fact that the investment of the farmer must have been threatened by existing conditions before he has been able, in the past, to overcome his individualism sufficiently to work with his neighbours in co-operative work. The country is strewn with the wrecks of co-operative organizations that were born prematurely and which died by the wayside, because the farmer himself deserted in the first real conflict with the established agencies that have handled his business. Co-operation, to be successful, must be founded not only on economic necessity, but it must grow through gradual evolution. It must have a small beginning and grow in strength through experience step by step, rather than by leaps and bounds. The fundamental mistake that is being made in many localities is to form a farmers' organization all at once on the plan of an organization that has taken years to develop. The plan may be sound but a co-operative organization can only succeed when given the unflinching support of the members who through years of experience have acquired an appreciation of the fundamentals that underlie a successful association of this kind. The success of any organization depends on its members, not on its form.

#### THE MEMBERSHIP IN A CO-OPERATIVE ORGANIZATION.

The membership in a co-operative organization should be confined exclusively to those who are producers and who, as producers, use its facilities. The members should be acquainted and have confidence in each other. It should never include those who contribute capital alone to it. Many organizations are formed by bankers, fruit dealers, or others who promote an organization for the purpose of making a profit from it. They may be formed in good faith by business men who realize the value of the co-operative movement and who are willing, as a service, and not for profit, to furnish the capital for its organization. The need for such an organization must spring from within, from the necessity of the industry, and not from a desire of a commission merchant, a broker, or of an ambitious manager who sees an opportunity of capitalizing the co-operative movement for his personal benefit. There are many organizations of the latter type that masquerade under the co-operative banner, but which are formed, managed, and controlled either directly or indirectly by those who make a profit on the packing organizations, on the sale of fruit, on the purchase of supplies, on railroad claims or trade rebates, or in other indirect ways. Such organizations are always kept prominently before the growers as co-operative, a situation which, when it exists, is almost *prima facie* evidence that the co-operative features are for the benefit of a few, rather than for all the members.

Membership in a co-operative organization should carry with it a responsibility on the part of the member strong enough to carry it through adversity of every kind. To feel this responsibility, the member must, of course, feel the necessity for the organization; he must feel he is a part of it; that the organization is his, developed and managed to promote and protect his interests. If the association is formed by the members to meet their economic needs, this feeling of responsibility pervades the membership, but if the association is formed to promote the welfare of the officers or any other class of people, or if financed by well-meaning people who really desire its success, an association cannot depend on the loyalty of its members in time of adversity.

One of the problems that a co-operative association always has before it is keeping alive the interest of its members. They must be a vital part of the organization. They must take an active part in its development. They must keep posted on the details of the business; the business methods of the organization must be an open book to them. There can be nothing mysterious about the management of the business. Contracts, salaries, trade or other legitimate rebates, railroad claims, profits, or earnings of every kind—these must be of such a nature that every producer can know about them if a co-operative association is to maintain the loyal support and confidence of its members. It must, of course, win that support by the results it accomplishes, and these results must be obtained by a business record that keeps free from suspicion regarding the integrity of its methods, and as free as possible from criticism regarding its business efficiency. Every defect of the organization will be kept before the members by its competitors and imaginary defects created by wilful misrepresentations by those whose aim to break down the membership, will always be prominently featured.

#### VOTING POWER OF MEMBERS.

In a strictly co-operative organization a fundamental principle should be "one man, one vote." It should be a real industrial democracy in which the members trust each other and lean upon each other's judgment as men. In such an organization neither the capital contributed, nor the volume of business transacted should be the basis of the responsibility or influence of the individual member, because neither can co-operate or be made a basis for lasting co-operation. In the European co-operative associations the "one man, one vote" principle is applied as a test to separate the true co-operative associations from the pseudo co-operative. Since co-operation is founded on man, not on capital nor on products, there is no fundamental difference in principle where capital is eliminated and product is substituted as the basis of voting and control. The control of a co-operative association should be founded on the equality of membership, whether the member contributed a large or a small volume of business. It is the members who, as men, co-operate in these organizations. The history of the co-operative movement in Europe and in California shows that this fundamental basis is sound. In the latter state, one organization, the California Fruit Growers' Exchange, which was formed as a stock corporation, but which operates strictly on co-operative principles, handles a business of twenty million dollars, more or less, annually on the "one man, one vote" principle of voting. The directors each represent a business that varies widely in volume and in value, but the "one man, one vote" principal of representation has stood the test of business experience and has been one of the foundation stones on which the success of this organization has been built. The directors reserved the right when they organized to vote pro rata on the shipments represented by them, but this method of voting has never been used in twenty years of business experience. The California statute governing the non-profit corporations without capital stock permits the voting power of members to be equal or unequal. In many of these organizations the voting power and property rights of the members is proportional to the contribution which each makes to the investment necessary for operation, the by-laws in some citrus fruit organizations providing that "members will contribute to the investment necessary for operation in true proportion to the number of bearing acres of citrus orchard owned or controlled by each member respectively bears to the whole number of bearing acres for which citrus fruits are delivered or engaged to be delivered to the association any time during the year such memberships are issued." Even with such a provision in the by-laws, the "one man, one vote" principle is generally used in voting on the business operations of the organization.

There is a strong sentiment against the "one man one vote" principle of voting when first presented to the average producer. The large producer fears control by smaller interests; the small landholders, domination by their larger neighbours.

The history of the co-operative movement, both in Europe and in the United States, shows clearly that this adverse sentiment is a prejudice rather than an actual weakness in practical operation. Equality of membership strengthens the desire to co-operate, and men work together in business harmony just as they do now in the equal control of churches, schools and in governmental responsibilities.

#### MEMBERSHIP AGREEMENT.

A co-operative organization to be successful must be held together by a membership agreement or contract holding the members together for business purposes. In no other way can an association attain that degree of stability that is necessary in a business undertaking. The association must know definitely what it is expected to do, the volume of business to be handled, the expenses to be incurred and the preparation necessary to transact its affairs in an orderly, economical manner.

Voluntary membership is usually suicidal in a co-operative association. In the last analysis the association can only succeed when the average member believes that the co-operative principal is sound; and that conviction must be strong enough to hold the members together when their opponents attack them insidiously and persistently. This faith must be founded on the sound business results of the organization, as well as on its larger influence on the development of the industry as a whole. Unless the benefits of the organization are large enough to keep the organization intact, the members cannot be held together indefinitely by any form of contract; but the human nature of the average farmer has not evolved to that ideal point when a temporary advantage offered him by his opponent may not blind him to the permanent advantages of the association to which he belongs. A membership agreement is a steadying influence on a grower who might be led astray by misrepresentation or by temporary dissatisfaction. Then, too, there are large numbers of farmers who are opportunists. They have no interest in the industry as a whole. They are interested only in their own immediate success. In handling their crops they are rampant speculators. They allow a sharp-shooting marketing policy, trying to hit the high spots presented by an association, a buyer, or a commission merchant, and giving but lukewarm allegiance to any individual or association. The opponents of the co-operative system understand this psychological trait perfectly, and unless the producer has formally bound himself to his association by a definite contract to handle all his produce through it for a given period of time they draw heavily from the membership by promising a larger return, or by playing upon his prejudices in other ways. It is an historical fact that a large proportion of the troubles and failures in the co-operative movement have been due to the irresponsibility of the membership whenever an association has been subjected to fire; and no one not experienced in the movement can have any conception of the degree to which misrepresentation, insinuation and other modes of creating disaffection are persistently kept before the co-operative producers by those who make an abnormal profit when the farmers' product is handled individually. The same kind of misrepresentation is used in building up one association as against another when those who handle the business of a co-operative association are interested in profits, or derive their compensation from the volume of business handled.

#### THE MANAGEMENT OF A CO-OPERATIVE ASSOCIATION.

The success of a co-operative organization depends primarily on the loyalty and stability of the membership; it depends further on efficiency in management. Efficiency in management cannot exist without stability of membership; nor can it be developed unless the members appreciate the necessity of providing an efficient management. The difficulty in most co-operative organizations is the lack of appreciation of the need of a high order of organizing and business ability on the part of the employees of the association. The common failure of co-operative associations



is usually attributed to inefficient management; as a matter of fact, it is due to the membership itself, which has fallen short in securing skilful employees. The individual producer is likely to gauge the requirement of management by the size of his own business. He falls short in his estimate when he acts on a board of directors and is charged with the responsibility of providing a management to handle successfully a collective business. Inefficient management is a measure of the degree of business efficiency of those who are charged with the direction of the affairs of the association; and unless the membership will sustain a board of directors in employing men of a high order of ability a co-operative association is short lived.

The management of a co-operative organization is more difficult than that of an ordinary corporation. The stockholders, not being experts in the affairs of the latter, do not often take an active interest in its details. The producer, on the other hand, is vitally interested in his own business and he is likely to take an active part, at least in giving advice concerning the conduct of the business. This is one of the most valuable assets in a co-operative organization if the manager is big enough to utilize it. Through the knowledge of the producer in the affairs of his association his interest and sympathy can be kept vital. If the management becomes autocratic, the interest of the member dies; if it is not big enough to work out a broad, progressive business policy, using such suggestions as are made by the producers in addition to its own knowledge and experience, it in turn loses its connection with the association. A management must possess tact, constructive ability, foresightedness, fearlessness in the conduct of the business and a clear conception of the real underlying purpose of the organization, if it is to succeed. The integrity of the management must be beyond reproach; it must be free from entangling business alliances; it must be free from the participation in any secret profits arising directly or indirectly from handling the business of the organization; in short, the dealings of the management with the organization must be an open book, free from questionable business practices of every kind. The influence of the management, next to the loyalty of the members, exceeds all other influences, and the success of a co-operative association depends on its working out in mutual confidence an efficient business system that is able to meet successfully all conditions as they arise.

#### A CO-OPERATIVE ORGANIZATION SHOULD BE FOUNDED ON A SPECIAL CROP.

A co-operative organization should be founded on a special crop and the locality in which it handles the product should be comparatively restricted. Special industries involve common problems to be solved by the producers, similar difficulties to overcome, similar trade practices, and similar trade connections. The members of an organization that is formed to handle fruit, vegetables, poultry and general farm crops have no common ground on which to stand, and these general associations have not been successful up to the present time because the membership cannot be held together. The citrus fruit growers of California are all interested in increasing consumption, in extending markets, in reducing the cost of distribution and marketing, in securing reasonable transportation costs, and in the same public policy questions that affect the industry. They have, therefore, developed a vitality in their organizations that have been attained in no other agricultural industry in America. An organization founded on different crops, on the other hand, has a series of totally different problems to meet at one time, different business connections to form and different classes rather than one class of opponents to meet.

#### A CO-OPERATIVE ORGANIZATION MUST DEVELOP THE INDIVIDUALITY OF EACH LOCALITY.

To be successful a co-operative association must sustain and develop the individuality and initiative of the different localities in which it operates. The unit of the organization must, therefore, be a locality in which the soils, the climate and other conditions produce a similar grade of product. If the products vary widely in

colour, texture, form or in other character, on account of the conditions under which they are grown, the producers cannot be held together because the grades cannot be made similar. The attempt to have a single organization over a wide territory is, therefore, likely to fail. No amalgamation of the farmers of different localities in a common organization has ever been successful. On the other hand, the orange growers of one locality, or of similar parts of a locality which produce similar grades of fruit, may organize to prepare their product for market under distinct local brands. Those of another may do the same thing, and a large number of local units may be formed as long as the unit embraces a product of similar grade and character. Then as a matter of economy and efficiency these local units may federate and create a central agency through which they handle their common problems. But each local unit preserves its local character and develops its local pride and reputation by selling its product under a brand that is the exclusive property of the local association. In addition to its local brand it may also add a brand of the central agency in order to give it greater selling power in all parts of the country; but no local unit should use the brand of a central agency exclusively, without using its own brand at the same time.

#### HANDLING, GRADING, AND PACKING.

The outcome of a co-operative organization formed to handle the growers' product will succeed or fail on the skill and integrity with which the product is harvested, handled, graded, and packed. The limits of this discussion will not permit this part of the subject to be handled in detail. A few fundamental principles, however, can be stated:

1. In the average association the individual grower does not possess sufficient skill to harvest, handle, grade or pack his products carefully, uniformly or attractively enough to permit the association to establish a standard of quality and therefore acquire a reputation for its brands or grades. A uniform standard of quality in the brands shipped by an association is fundamental to success. This seems like an axiom, but the fact is that this is the rock on which many co-operative organizations have been dashed to destruction. Poor handling in harvesting, improper handling in preparing the product for sale, careless or dishonest grading, or lack of skill and knowledge in grading and packing—these are common rather than unusual conditions in the conduct of many co-operative associations where the handling of the product is controlled by the individual members. The output of an association, therefore, acquires no stable merchandizing value. The brands are not a guarantee of quality.

2. A reputation for uniformity in grading and packing can only be acquired when the product of all of the members is handled under uniform conditions. The standardization of a product can result only from standardizing its handling, grading, and packing.

3. A uniform product can be established by having the product of the individual members handled by the members, under the supervision of the association, or for members by the association. The former method is employed successfully in some deciduous fruit associations; the latter is the usual method in the citrus fruit associations. The conditions which lead to either method are local as well as those of the industry in question. In the citrus industry the crop is harvested over a long period of time and is comparatively non-perishable. It is possible therefore to systematize the methods of handling, to assemble the product in a central packing house, and to grade and pack it under standard rules. Without this standardization of handling, grading, and packing no co-operative association can acquire an asset in the reputation of its brands. With standardization it can acquire a reputation which makes its output sought after and for which the trade will pay a premium. A practical difficulty in handling a co-operative association lies in the fact that every member thinks that he produces a product that is the equal or superior to that of every other member. The handling of this condition is one that tests the tact of the most successful manager. It is a practical condition, however, and not a theory, that must be met with firmness, with justice and with patience by every co-operative association.



## APPENDIX No. 34.

*(Monthly Bulletin of Economic and Social Intelligence, April, 1913.)*

## FRANCE.

## AGRICULTURE CO-OPERATION IN FRANCE—GENERAL INTRODUCTION.

Agricultural co-operation of late years has made such rapid progress that economists in every country have endeavoured to define with precision the nature and significance of a social movement which, before their own eyes, we may say, has effected a rapid and radical change in the organization of rural life.

The International Institute of Agriculture has been well advised in taking into consideration this problem, the solution of which demands methodical and careful study of the co-operative movement in agriculture. We must recognize the value of the economic distinction adopted by the Institute which separates co-operative societies (that is those societies whose object is provision for the economic needs of their members through the creation of common funds of capital and labour, or through some system of mutual obligation) from other forms of organization.

In France, however, this distinction alone does not seem sufficient to enable us to give a clear definition of agricultural co-operation as it is found spread over the whole country. On a closer analysis it becomes evident that the distinction has been based only on the professional position of those co-operating. Thus an essential element has been neglected in not taking into account the special aim of all agricultural co-operative societies, which, directly or indirectly, must always be the promotion of agricultural production. Neglect of this must inevitably create confusion between agricultural co-operative societies and the other groups which, though like them composed exclusively of agriculturalists and even adopting a co-operative form, cannot be considered as purely agricultural. These societies work in the interest of their own members, not so much as agriculturists, but as consumers and in other characters apart from their professional one. Certain societies, those for instance for the purchase on advantageous terms of food, clothing and other supplies for their members, might, without acting contrary to the purpose of their operations, include many who are not agriculturists.

Widening our view by taking into consideration this underlying aim of agricultural production and noting the important principle of solidarity which in greater or lesser degree unites the members of an agricultural co-operative society in mutual liability, a clear definition of the conception and role of agricultural co-operative societies has been attempted in France. These societies, notwithstanding the differences in form and the varying degrees in which they present their essential characteristics, it seems possible to divide into four principal categories:

- 1st. Co-operative purchasing societies, generally called syndicates;
- 2nd. Co-operative insurance societies;
- 3rd. Co-operative credit societies;
- 4th. Co-operative societies for production, adaptation, preservation and sale.

If we begin our study of the agricultural co-operative movement in France with the consideration of the fourth class, we shall find a new factor of great importance to its development and more generally to the whole of French co-operation. This factor is the law of October 29, 1906, supplemented by the administrative order of August 26, 1907, which for the first time in French legislation, determined the characteristics

of co-operative agricultural societies. Although thus recent, this law is in full force, and we may expect a continuation of the good results of its action during the few years of its existence. What these results are, we shall here try to show.

#### A. CO-OPERATIVE SOCIETIES FOR PRODUCTION, ADAPTATION, PRESERVATION AND SALE.

Agricultural co-operation originated in France at an early period; it is said that even in the 12th century, there were fruit-growing and cheese-producing co-operative societies. In agriculture, as in other trades, co-operation has long existed with very different objects. But in the French law, there is no special statute to regulate societies called co-operative or to frame their organization. A bill on the subject passed the Chamber of Deputies but the Senate suspended the discussion in 1896 and it was never resumed.

At present co-operative agricultural societies are subject to the common law regarding societies. They are regulated either by articles 1,832 to 1,873 of the Civil Code, or by the Commercial Code and the Laws of July 24, 1867 and of August 1, 1893. They vary as to their legal form, the prevailing forms being that of civil societies and that of limited liability companies, with variable capital. The first of these has the advantage of requiring few formalities for the constitution of the society and of leaving to its members the greatest amount of liberty for drawing up its rules and organizing its administration. On the other hand, every member is responsible to the extent of his property for the obligations of the society and from this nothing can absolve him except a thirty years limitation. Limited liability companies with variable capital are, on the contrary, subject to exact and minute regulations as regards their constitution and administration. It is necessary to protect the rights of the third party, for the members are responsible for the debts of the company only up to the amount of their shares.

Under the common law, peasants have constituted many co-operative societies for the adaptation and sale of their produce. They must adjust themselves to the new conditions of modern cultivation and small cultivators must perfect their methods of working to meet the scarcity of labour and to find markets for their crops, if necessary even at long distances. Under these circumstances agriculturists can no longer stand alone but must seek in association the most effective means of overcoming their difficulties.

At present the number of co-operative agricultural societies for production, preservation, adaptation and sale may be calculated approximately at more than 2,600, including about 1,800 societies for the sale of fruit, 500 dairies, 80 societies for the manufacture or sale of wine and for distilling, 20 oil factories, 40 starch factories, threshing societies, etc. These societies, being freely constituted by private initiative, it is not easy to obtain precise information as to their modes of working and the advantages they offer to their members, but their number at least indicates the spread of the co-operative idea in the rural world.

So important a movement could not but attract the attention of the public authorities, and a law for its protection and guidance was passed on December 29, 1906. This law purports to be a mere addition to the law of March 31, 1899, which established the Regional Agricultural Co-operative Credit Banks, and enabled them to obtain, by way of advances free of interest the advance of 40 million francs and the annual dues paid into the treasury by the Bank of France in virtue of the law of November 17, 1897. By the law of December 29, 1906, the government may "deduct from the annual dues and forward gratuitously to the Regional Banks special advances intended for the co-operative agricultural societies and repayable within 25 years." These advances must not exceed one-third of the dues paid annually by the Bank of France. By article 3 of this law, "The Regional Banks shall receive from the co-operative agricultural societies on the advances made through them, an interest fixed by them and approved by the Government after information received from the Com-

mission referred to in Art. 5." According to Article 4, "only those co-operative agricultural societies which are composed of the whole or a part of the members of one or more professional agricultural syndicates may receive advances, whatever may be their legal form. Such advances must be made with a view to effect or to facilitate transactions concerning the production, adaptation, preservation, or sale of agricultural produce coming exclusively from farms belonging to members or concerning the carrying out of agricultural works for the general good, but the aim of the society must not be commercial advantage." Another article determines the composition of the Consultative Committee for the division of the funds advanced and Article 6 fixes the maximum of these advances at double the amount of the paid-up capital of the co-operative societies which contract the loan.

These are the provisions of the law of 1906, the construction of which is very simple, so that it is easy to ascertain the essential principles which have inspired the legislature. Of these the first is that the societies desiring to benefit by the law must be strictly professional in character, and must be exclusively recruited from among members of agricultural syndicates. Another is the granting of assistance and encouragement to private initiative while stimulating it to further effort. The law grants advances to be repaid by a certain date, and not gratuitous assistance. To furnish capital at a low rate to co-operators is to supply them with the means of carrying on genuine undertakings. But they must not forget that the society can only carry on reasonable and profitable undertakings which result in lasting work for the benefit of the members and permit of the due repayment to the state of the sum borrowed in order that it may serve for a new enterprise. This feature of the law is emphasized by the provision which fixes the ratio of the amount advanced to that of the capital paid by the members, that is to say, to the personal effort that they have made. But the legislature, while appropriating to professional groups sums belonging to the community was not encouraging collective self-seeking, nor injuring legitimate interests. It showed clearly that the co-operative societies which borrow should not do so for gain nor should they accept any produce except that sent from farms belonging to members. It has especially indicated the spirit of the law by stipulating that those benefited must make it their object to facilitate the production, adaptation, preservation, and sale of agricultural produce, or the carrying out of works of general utility. It thus encourages a branch of national industry, increases agricultural production, and contributes to the prosperity of the country. Finally, this law leaves to agricultural co-operative societies that apply for a loan the right of choosing as hitherto their legal form, thus providing safeguards for private initiative while supplying means for effective action.

It need hardly be said that the liberty of co-operative societies to which advances have been made, is not left uncontrolled. The decree of August 26, 1907, has defined with precision the guarantees required by the state from societies which contract loans: the shares must be held in the members' own names, must be reserved for agriculturists, and must not bear interest higher than 4 per cent; the members, or at least some of the members of the committee, must conjointly be answerable for engagements undertaken by the society towards the state; mortgages must be registered for the benefit of the state on real property purchased or reorganized with the sum advanced. The loan is also guaranteed by the intermediary Regional Bank, and the accounts and the management of the co-operative society are placed under the control of the Ministry of Agriculture.

The law of 1906, supplemented by articles 25 and 31 of the financial law of the April 8, 1910, by which agricultural co-operative societies are exempted from the tax on personal property and from licensing fees, exercises on agricultural co-operation a vast and daily increasing influence. The peasants were not slow to understand the immense advantage which they would derive from these concessions offered by the state to agriculture, and it may safely be stated that the transformation of



cultivation in France is in great part due to the law of 1906, the application of which is becoming more widely extended. In 1908, 23 societies obtained loans; 43 in 1909, 73 in 1910, 78 in 1911, 105 in 1912. In 1908 the loans amounted to 964,325 francs; in 1909 to 1,157,250 francs; in 1910 to 2,284,265 francs; in 1911 to 2,364,280 francs, and in 1912 to 2,689,014 francs. At the close of 1912, 293 co-operative societies had benefited at least once by the law. These loans have been granted to societies with widely differing aims, and the law has been extended to every kind of co-operation to which it could be applied. It is especially interesting to see the work accomplished by this law in every branch of agriculture, and to judge of its results, whether in renewing the activity of old societies by supplying them with the means of adapting themselves to the conditions of modern production, in reviving languishing societies, or in facilitating the creation of new societies which shall assure to the cultivators the benefits of the recent improvements in agricultural implements.

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The law of 1906 has probably had most effect in encouraging the formation of societies for the employment of agricultural machinery. Perhaps it is not too much to say that it is only through this law that such societies have arisen in France, and this is not surprising. Cases do arise, it is true, where producers are driven to form them upon pain of losing the entire fruits of their labour if they neglect to do so, but, on the other hand, the benefits derived from them are often less evident and more remote. Without speaking of the force of habit, it must be admitted that the cultivator has not a clear notion of the value of time or labour. It needed the increase in wages paid to agricultural labourers and, above all, the scarcity of labour to make the importance of machinery in the cultivation of small holdings evident to the peasant. Every member of these societies had also to learn to regulate his work in accordance with that of his fellow-members, and to realize that the necessary machinery is not exclusively for his own use. To prepare the way for the establishment of co-operative societies for machinery, disinclination and established customs had to be overcome in the peasant before the idea of combination took root in his mind. Another difficulty also had to be met; it had reference not only to the distribution of profit or loss in connection with sales effected in common, but also to the outlay of capital in the purchase of machines not yet proved or well understood, and viewed therefore with suspicion by the average peasant. To train these cultivators, it was indispensable to require them at the beginning to disburse large sums, at the same time giving them every assurance that the public authorities were so fully persuaded of the advantages and profit to be derived from the use of machinery in agriculture, that the state was prepared to grant credit on the results. The first step thus taken, the co-operative societies for the use of machinery rapidly increased in number and these establishments, small at first, now rival the larger in the possession of traction-engines, of threshing machines, winnowers, elevators, feeders, propellers, sowers, sorters, reapers, manure-spreaders, corn-sifters, husk-separators, sack-fillers, binders and other machines.

## APPENDIX No. 35.

## AN EXPLANATION OF THE PROVISIONS OF THE AGRICULTURAL CO-OPERATIVE ASSOCIATIONS ACT OF SASKATCHEWAN, 1913.

## INTRODUCTION.

It is now generally admitted that organization is essential to success in practically every phase of industrial activity. Manufacturers, financiers and the others commonly called the "business classes," have long since accepted this as a fundamental principle in their operations, and the farmers of our country are rapidly awakening to a realization of the fact that the business of farming, both in production and marketing, must be placed on an organized basis if agriculture is to hold its own with other lines of industry.

Realizing that individual effort would be of little avail against the forces opposed to them, farmers have grasped the idea that as farmers their interests are identical and that in co-operative effort, each helping the other and all working together, lies their hope of success.

How to market our grain crop so as to obtain its full value was for years the chief problem confronting western farmers. No solution was found until the farmers of the province united to bring into being the Saskatchewan Co-operative Elevator Company, through which they could place their grain on the markets of the world. This at first despised and ridiculed organization, has during the few years of its existence made such rapid progress that it is to-day the largest initial grain handling concern in Canada, and its financial success has demonstrated the soundness of the co-operative principle.

Noting the success of co-operative grain marketing, local grain growers' associations in many districts adopted the co-operative principle in purchasing binder twine, building and fencing material, and other lines of farm supplies. These ventures proved highly satisfactory, but as the associations had no legal status each member was individually liable for any debts which the association might contract. This led to a widespread desire among farmers for the enactment of such legislation as would facilitate the organization of co-operative associations, for the production and marketing of farm products, and the purchasing of farm supplies, in which shareholders should enjoy limited liability as do shareholders in joint stock companies.

To provide for the organization and registration of such associations, The Agricultural Co-operative Associations Act was passed at the 1913 session of the Provincial Legislature, an officer of the Department of Agriculture was appointed Registrar of Agricultural Co-operative Associations, and this leaflet explaining the provisions of the Act has been prepared to aid associations in organizing.

## EXPLANATION.

What is an incorporated agricultural co-operative association?

An incorporated agricultural co-operative association is a group of farmers, who being desirous of uniting together for some commercial purpose incidental to their business, have complied with the provisions of The Agricultural Co-operative Associations Act, and have, as a group, been invested with legal status and authorized to own real estate and other property, to transact certain lines of business and in other ways to have the rights and privileges enjoyed by individuals.

What lines of business are these co-operative associations authorized to conduct?



Three distinct lines of business are open to the associations. They may produce live stock, grain, vegetables or any kind of farm products, they may market the live stock and other farm products which the shareholders or others have produced, and they may purchase farm supplies for shareholders or others. (Section 4.)

Can one association engage in all of these lines of business or must each association confine its activities to one line?

It is entirely optional with each association which and how many of the lines of business it will undertake, but each association is authorized to conduct only such lines of work as are stated, in its memorandum of association, to be the objects for which it is formed.

Explain this more fully. Give an example.

One association might state in its memorandum that its object was the production and sale of pure bred and high grade Shorthorn cattle. This would be a producing and marketing association, but its activities would be limited to the production and sale of pure bred and high grade Shorthorn cattle, and it could not legally produce or market other farm products or engage in the purchasing of farm supplies. Another association might state that its object was the marketing of farm products. This association could market live stock or any kind of farm products, but it could not purchase and maintain pure bred sires for the use of its shareholders, nor yet purchase supplies. A third association which stated that its objects were "To produce and market farm products and purchase farm supplies," could produce any kind of cattle or other farm products, could market all kinds of produce and could also engage in a purchasing business. It would cost no more to incorporate an association which included all the purposes for which associations may be incorporated than to register an association including only one, but once an association is incorporated it can conduct only such lines of business as are specified as its objects in its memorandum of association.

What benefit do shareholders derive through having the association incorporated?

Through the incorporation of the association, the shareholders secure the privilege of limited liability, that is, each shareholder in an incorporated association is only liable for the debts and liabilities of the association to an amount equal to the amount unpaid on the share or shares for which he has subscribed. If his shares are fully paid up he has no further liability; even if his shares are not fully paid up he is not liable to an action until an execution at the suit of the creditor against the association has been returned unsatisfied in whole or part. (Section 12.) In addition to this the association will have continuity of existence, as shareholders will continue to be shareholders until they sell their shares, or its affairs are wound up and there will be no annual membership fees to pay. Moreover, as a shareholder in a co-operative association, each man will have an equal voice in directing the affairs of the concern, and will be in a position to gain much information and experience which will be of value from an educational and social, as well as from a financial, standpoint.

How many shareholders must each association have?

Five or more persons, upon complying with the provisions of the Act, may be registered as an agricultural co-operative association. (Section 4.)

What capital must an association have, and into what number of shares must it be divided?

No set amount is required by the Act; it depends entirely upon the line or lines of business which the association purposes undertaking. A marketing association which does not purchase produce, but simply assembles shipments and forwards them to market, defraying the expense of marketing by levying a commission on the price received, requires only a small capital, say enough to furnish an office, purchase a weigh scale, equip stock yard, etc. A capital stock of \$500 divided into 250 \$2 shares should suffice, and all of this need not be subscribed before business is started. If the association purposed breeding live stock, it would be necessary to purchase a number of pure bred sires. If four or five pure bred bulls were needed, it might be

well to set the authorized capital at \$1,000, divided into 40 \$25 shares. On the other hand if an association intended to go into a purchasing business, buying farm supplies in carload lots, a paid up capital of \$1,500 to \$3,000 might be necessary and a larger amount could be used to advantage. The authorized capital for such an association might be set at \$10,000, divided into 200 shares of \$50 each.

The amount of capital and the value of shares should be regulated by the requirements of the business to be conducted and the number of shareholders it will be possible to secure. This matter is entirely in the hands of the association, and the authorized capital may be increased or decreased from time to time by bylaws of the association. (Section 7.)

What is meant by the terms Authorized Capital, Subscribed Capital and Paid Up Capital?

The authorized capital of an association is the amount set forth in its memorandum of association, and beyond which it has not the right to sell stock. The subscribed capital is the par value of the total shares sold; the paid up capital is the amount which has actually been paid on the shares sold.

Do not shares have to be fully paid for when bought?

That is a matter which each association decides for itself, shares may be made payable by instalments at such times as may be determined by bylaw of the association. (Section 9.)

Are the shares transferable?

Yes, shares may be assigned or transferred, or the association may repurchase shares, but no such assignment, transfer or repurchase is valid unless and until approved and authorized by the directors of the association, and no such transaction may be approved by the directors if it would reduce the number of shareholders below five, or the number of agriculturists below seventy-five per cent of the total shareholders. (Section 11.)

How is the voting power of shareholders determined?

At association meetings each shareholder has one vote only regardless of the number of shares held by him. (Section 14.)

Does each association draw up its own by-laws?

All associations incorporated under The Agricultural Co-operative Associations Act are governed by a set of standard by-laws, which have been prepared by the registrar of agricultural co-operative associations and approved by order of the Lieutenant Governor in Council. These provide for the holding of meetings, annual and special, the number, election and duties of officers, an annual audit of accounts and such matters of a routine nature. Copies of the standard by-laws may be obtained free upon request from the Department of Agriculture, Regina. (Sections 6 and 28.)

But what provision is made for the regulation of matters which are of a more local nature?

Each association has power to pass such supplemental by-laws, not inconsistent with the provisions of the standard by-laws, as may be deemed advisable by the association. These supplemental by-laws, however, do not become operative until examined and approved by the registrar of agricultural co-operative associations. (Subsections (2) and (3), section 6.)

What matters would remain to be provided for in the supplemental by-laws?

Each association should pass a supplemental by-law regulating the number of directors which the association shall have. (The standard by-laws provide that there shall be three, six or nine directors as the individual association may determine.) Each association should also adopt a supplemental by-law setting forth the manner in which dividends shall be paid to non-shareholder patrons, *e.g.*, whether paid in cash or credited on account for capital stock. (Section 18.) If all shares are to be fully paid up when subscribed for, a supplemental by-law to that effect should be passed.

If shares are not to be fully paid up when allotted, a supplemental by-law regulating the manner in which calls may be made on the unpaid portion should be passed.

If when profits are made the association desires that they shall be distributed quarterly, semi-annually or annually, a supplemental by-law covering that matter should be adopted. Then associations going in for some particular line of production or marketing will require rules for the regulation of the details of their business. These to be legally binding must be registered as supplemental bylaws.

Can an association obtain assistance in drafting its supplemental by-laws?

Yes, the registrar is required by the Act to prepare, upon request, such supplemental by-laws as may be required for the regulation, government or management of any proposed association provided that such request is accompanied by a full outline of the object and business of the said proposed association. (Section 28.)

Can an incorporated association do business on credit terms?

Associations incorporated under this Act are required to conduct a strictly cash business. Goods must be paid for in cash when delivery is accepted, and in selling no credit may be given. (Subsection (2), section 5.)

Is there no exception to this rule?

Associations may purchase real estate on credit, to be used and occupied as business premises, and may give a valid mortgage on property so purchased as security for any unpaid balance of the purchase price. (Subsection (2), section 5.)

Does the Act include any regulations regarding the manner in which farm supplies shall be handled?

The business of associations so far as farm supplies are concerned is confined to the handling of building and fencing material, fuel, flour, feed and such other commodities as may be shipped in car lots and distributed from a warehouse. Associations are not authorized to conduct retail stores (clause 3, section 2.)

Would it then be necessary for an association to purchase each commodity by the car lot?

Not at all; a carload might be made up of several different kinds of goods. For instance, a car of mixed groceries might be purchased, or a mixed car of lumber and fencing material might be brought in.

How are the profits, which associations may make, to be apportioned?

The creation of a reserve fund is made a first charge upon the profits arising from the business of the association. At least ten per cent of the total profits must be set aside each year for this purpose until a reserve has accumulated equal to at least thirty per cent of the paid up capital stock. After deducting the amount for the reserve fund, interest may be paid on the paid up capital stock at a rate not to exceed six per cent. If after putting aside the reserve fund and paying interest on the paid up capital stock any profits remain they must be divided among the patrons of the association, whether shareholders or not, in proportion to the business which they have done with the association. (Section 18.)

Must the dividends which become due to a non-shareholder patron be paid in cash?

This is optional with the association. If the association so desires a supplemental by-law may be passed requiring that the dividends due to non-shareholder patrons may be retained by the association and credited to the account of such patron on account of capital stock until an amount has accumulated equal to the par value of one share. When such sum has accumulated a stock certificate for one share would be issued to the patron and he would thereafter share in the dividends as would other shareholders.

What steps are necessary to secure the incorporation of an agricultural co-operative association?

1st. Five or more persons must agree to associate themselves together for some purpose or purposes under the provisions of The Agricultural Co-operative Associations Act.

2nd. Two copies of a memorandum of association must be carefully prepared. A form for this document will be found in Schedule A to The Agricultural Co-opera-



tive Associations Act, or blank forms may be obtained from the Co-operative Organization Branch, Department of Agriculture, Regina.

3rd. The two copies of the memorandum of association must be signed in the presence of a witness by the five or more parties wishing to be formed into an association, and the witness must make an affidavit, setting forth the fact that he saw the parties sign, and that each of them is in his opinion of the full age of twenty-one years.

4th. Two certified copies of whatever supplemental by-laws may be decided upon should then be made out and forwarded along with the duplicate memorandum of association and the affidavit verifying the signatures thereto. A postal note or express order for \$4.50, payable to the Registrar of Agricultural Co-operative Associations, should be enclosed to cover registration and advertising charges, and the whole should be forwarded to the Registrar of Agricultural Co-operative Associations, Department of Agriculture, Regina.

What further steps are necessary to get the association legally under way?

Upon receipt of notice from the registrar stating that the association has been duly incorporated, the association is authorized to commence business. An organization meeting should be called within two months. Notice of this should be advertised at least ten days previously in some newspaper circulating in the locality where the association is situated and in addition a notice should be sent by mail to each of the subscribers to the memorandum of association, stating the date, hour and place where the meeting is to be held. At the organization meeting the board of directors must be elected, an auditor for the current year should be appointed and the general business of the association should be discussed. Immediately after this meeting the board of directors should meet and elect from their own number a president and vice president for the current year and appoint a secretary treasurer who may or may not be a director. After the holding of this first general meeting the secretary should forward to the registrar a statement showing the names of the members of the board of directors and the period for which each is elected, the names of the president, vice president, secretary treasurer and auditor and a list of the shareholders, showing in detail the numbers of the shares owned by each and the amount which has been paid on each. This information is required at the registrar's office so that the financial standing of the association may be ascertained by parties interested.

What assistance is given associations in organizing?

The Co-operative Organization Branch of the Department of Agriculture will supply copies of The Agricultural Co-operative Associations Act, copies of the standard by-laws and blank memorandum of association forms free of charge. Information regarding the various lines of co-operative effort in other countries can also be obtained from the same source, as well as data regarding freight or express rates on farm products and available markets for such produce, and speakers will be sent from the branch to aid producing and marketing associations in organizing.

The central executive of the Saskatchewan Grain Growers' Association, from their head office at Moosejaw, are prepared to aid purchasing associations in organizing and will act as a central purchasing agency through which they may carry on collectively their activities in the purchase of supplies as well as in the sale and exchange of farm produce.

If you wish to obtain copies of the Act, standard by-laws or blank forms, or if there is anything connected with this matter regarding which you desire further information, communicate with The Co-operative Organization Branch, Department of Agriculture, Regina.

## APPENDIX No. 36.

## UNITED FRUIT COMPANIES, LTD., OF NOVA SCOTIA.

BERWICK, N.S., December 6, 1913.

Dr. C. C. JAMES,

1448 Yonge Street, Toronto, Ont.

DEAR SIR,—Mr. S. C. Parker, President of the Fruit Growers' Association, has asked the writer to give you a brief history of the co-operative movement in Nova Scotia.

This is rather a large subject to tackle in a letter, but we will endeavour to give you some idea of what is being done and the system under which we work.

There are thirty-two companies comprising the United Fruit Companies of Nova Scotia, Ltd. These subsidiary companies are incorporated under a special Act passed by the Legislative Assembly at Halifax in the year 1908. Members of these companies must be fruit growers and agree when taking stock in the company, to put the whole of their standard varieties of apples through their company. The apples are hauled into the company's warehouses in the fall and stored there, and are packed out as required.

Competent managers are employed, supervising the work in each warehouse. These apples are packed under three grades, No. 1, No. 2, and No. 3's, and the growers receive the average price obtained for each grade according to the grade into which his fruit packs. In short, the grower pools his apples with those of his fellow members and receives the average price realized.

The United Fruit Companies of Nova Scotia, or, in other words, the Central Association, is incorporated under a special Act of Parliament passed in 1912. You will see by a perusal of this Act the conditions under which these companies unite with the Central Association. Each company has to subscribe to the Central 20 per cent of its own authorized capital. These subsidiary companies hold very much the same relative position to the Central Association as the individual members of the subsidiary companies to their companies.

The Central Association has complete control over the entire output of the whole of the co-operative companies.

The United Fruit Companies, or Central Association, was incorporated in July, 1912, and the first annual report is enclosed herewith, also the financial statement.

For twelve months prior to incorporation an experimental association was run without incorporate powers and with absolutely no control over affiliated companies and depending entirely upon the good will of these companies to support it in the good work it was carrying on.

One would hardly expect any very good results from a central association endeavouring to run on these lines, yet it can be said to the credit of the affiliated companies that the experimental Central Association was an unqualified success and gave universal satisfaction.

You will understand that as a young association just commencing and having no similar association to use as a model, we have had to shape our course very much on our own ideas. We realize fully that there are many weak spots in the organization, and we are now preparing an amendment to be brought before the present session of the House of Assembly at Halifax to remedy in our charter some of the



very obvious defects and to increase our powers to the extent of legalizing much of the work which we wish to accomplish in the way of buying and handling supplies.

You will readily understand that with the whole of the fruit from all the companies being placed in one pool, it is essential that all the companies have some guarantee of a uniformity of pack. This is assured by employing inspectors who visit all the warehouses constantly and are responsible to the executive committee for uniformity of pack.

The Central Association alone has the power to make sales or to move the apples in any way, and instructions are sent out from the central office constantly, instructing the companies what to pack, and when, how and where to ship.

The purchasing of supplies for the use of the members of subsidiary companies also forms a very important part of the work of the central association: the farmer is able to obtain his fertilizer, seeds, spray materials, power outfits, feed and flour and practically everything required on his farm, through the Central Association and is thus able to save considerable money, obtaining all these supplies at a much lower price than even the wholesale merchants can buy it. Our contracts already placed for fertilizer amount to over 6,000 tons, so that you will readily understand that the buying power of the central association is tremendous.

We have found that things have run exceptionally well this year; we have practically no friction in the companies and all the company managers are working in perfect harmony with the central office.

We have established an office at Halifax in charge of Capt. C. O. Allen, our superintendent of shipping, and much valuable work is done by him; all our bills of lading are made out at this office and our interests at the docks are carefully guarded by our superintendent.

We have also established an office in London, in charge of Mr. J. N. Chute. This office is accomplishing really valuable work and has saved for the central association, and through the central association, for the farmers of the valley, many thousands of dollars.

Through the superiority of the pack of our fruit we have obtained a most enviable reputation on the European markets and the co-operative pack of apples are now realizing a much bigger figure both in the auction room and by private sale, than by any other apples packed in Nova Scotia. This fact, together with the fact that the farmer has obtained all the necessities of farm life through the central association at a much lower figure than ever before, will demonstrate to you what a really valuable work is being carried on, and how very much it is to the advantage of the farmers.

In addition to this we have accomplished a really valuable work in the way of better transportation of fruit. It is too long a story to be able to relate how this has been accomplished in a communication of this kind, but perhaps later on we may have the opportunity of explaining to you personally.

We enclose copies of several circulars issued to the members of subsidiary companies and written by the writer of this communication. These will give you some little idea of what is going forward.

Trusting that you will find the information contained in this and in the enclosures of use to you, we are,

Yours faithfully,

THE UNITED FRUIT COMPANIES OF N.S., LTD.

(Sgd.) A. E. ADAMS, *Secretary*.

## APPENDIX No. 37.

PRESS EXTRACTS *RE* HOUSING PROBLEM.

## CO-OPERATIVE VILLAGES WITH GARDEN PLOTS AT REASONABLE RENTS.

Through the efforts of Lord Grey and others like him the problems of providing attractive and suitable cottages for the tenantry of English villages is resulting in some commendable work. Recently Lord Selbourne opened one of these new model villages near Petersfield near Hampshire. This particular village has many fine points. It is situated on a hillside overlooking a beautiful valley. The cottages are scattered here and there no more than two being placed together.

The designs for the cottages are so tasteful that several have already been copied for "week-end cottages" in other parts of the country. This adds to the landscape instead of marring it. The cost of the cottages varies from £300 to £400; the walls are eleven inches thick, hollow in the middle and plastered outside. In many cases the upper storeys are timbered and the out-buildings are half-timbered. The cottages contain five and six rooms.

Rents vary from 5s. 9d. to 4s. 6d. per week and with each cottage is included a full quarter acre of land which affords a fine garden plot. If any of the tenants wish it is possible to take land from the company. Some have taken as much as seven acres. The company owning the village has made it a co-operative affair by allowing the residents to share in the profits. On taking a cottage a tenant takes a certain number of shares in the village. If, later, he wishes to leave he receives his outlay back again. It may be he will wish to keep his connection with the company, in which case he is allowed to do so.

Tilmore Gardens is the name of the new village, and if the scheme works well here it argues for success elsewhere because living is high owing to the residential character of the neighbourhood.

## ATTRACTIVE DWELLINGS AT MODERATE RENTAL RETURN FAIR INTEREST ON CAPITAL INVESTED.

(*Montreal Gazette.*)

Mr. G. Frank Beer, president of the Toronto Housing Company, Limited, spent yesterday in Montreal on affairs connected with the operations of the company, which is a semi-philanthropic, but eminently business-like organization engaged in solving the problem of providing decent, hard-working families of the mechanic and clerk class with clean, healthful and attractive dwellings at a rental which, while moderate, returns a fair profit on the amount invested. The experiment is one which is being watched with great interest by many municipalities, and the company in its carefully worked-out plans seems to have evolved a scheme which should meet with complete success.

"The Company," said Mr. Beer, to a *Gazette* representative, "was formed in 1912, and the first move made was to work out a plan of financing the project. Hon. W. J. Hanna, Provincial Secretary of Ontario, took a great interest in the subject from the first, and when our plan was laid before him, he introduced a bill which was later passed unanimously. The basis of our plan was not to use public funds, but only public credit, and to secure this the bill in question empowered any Ontario city or town to guarantee the bonds of housing companies up to 85 per cent of the actual amount of money required. It was decided that anything less than one million dollars would not be an economic unit for a housing enterprise and the capital was therefore fixed at that figure, \$850,000 to be raised by 5 per cent forty year bonds, guaranteed by the City of Toronto, and \$150,000, in common stock, payable only in cash as called for by our operations, and the dividends upon which are limited to 6 per cent by the act. Over \$100,000 of the stock was soon subscribed, and this

permitted the city to guarantee \$500,000 of our bonds, which were issued as required. This assured the adequate financing of our scheme, and we proceeded with our building plans.

"The first building unit was located upon a vacant block on Spruce street, in the rear of the old General Hospital, the land being leased from the hospital trustees.

#### 38 FAMILIES PLACED.

This is a respectable residential section, within a mile of the business centre of the city. Upon this land we erected self-contained cottage flats, providing dwellings for 38 families, at a cost of about \$60,000 for construction. These dwellings were completed last fall, and we had three applications for every available flat. The smaller flats consisted of living-room, pantry-kitchen, one bedroom and bath. It is part of our plan that families must not be crowded into insufficient living quarters, so occupancy of these small flats are restricted to couples without children, or with but one infant. Couples with one or two growing children were required to take flats with two bedrooms, while our future plans provide for dwellings with three or more bedrooms for larger families. In Spruce Court, as our first unit is called, we have a central heating plant, which supplies heat and hot water for domestic purposes, and we also install electric fixtures, gas stoves and window blinds. The rental of these flats is based upon the actual cost, the taxes and the upkeep, plus six per cent dividends upon the common stock funds expended and the interest and sinking fund for the debenture funds expended upon the unit. A reserve repair payment of \$1 per month is collected for each flat, but if no repairs are made necessary by the occupants carelessness this money is refunded at the end of the year or at the expiration of occupancy. This puts a premium upon careful tenancy. A charge for heating is also collected for eight months of the year, but after deducting the repair payment, the average monthly rental for one of the small flats is \$12, and for the two-bedroom flats \$17. Each flat has its separate entrance and separate balcony, with sufficient space for drying clothes at the back. The remainder of the ground space is pooled for the common good the flats all facing, not upon the street, but upon a central grass court, which forms a park for the tenants and a play ground for the children.

#### FLATS ARE CHEAP.

"We now have under construction one-third of our second unit, which when completed, will provide dwellings for 200 families on our Bain avenue property, a highly desirable location in Riverdale, overlooking the Don valley and less than two miles from the centre of the city. The land lies between two public parks and the dwellings will have from one to four bedrooms. The rentals will be in this case also be based upon the actual cost, plus the charges mentioned.

"Our next undertaking will be a unit in the northwest section of the city, in a section which has 40 or 50 factories in the vicinity. Here we will probably erect individual houses, and sell some of them upon easy terms. A bowling green for the occupants will be one feature of this development. We have also a one-hundred acre farm about two miles from the northeast city limits, where we propose to make a garden suburb, as soon as trolley transportation is available.

"Under the Act, the city has the right to take over our holdings any time after five years and conduct them as municipal enterprises. We believe that we have already justified our existence as a company. We are not attempting to empty the slums or solve the slum problem, which is a result of community mis-management, and they must be solved by the community. We are simply trying to prove that it is possible to give the working man of steady habits a fit place to live in at a reasonable rental or a fair purchase price, and that not by pauperizing him under the guise of philanthropy, but by exacting a fair return upon the capital invested. We do not hope or desire to provide for all working men, for that would be impossible but we can relieve the pressure to a certain extent and we are setting an example of what can be accomplished by careful planning, economical construction, and fair dealing all around."

## APPENDIX No. 38.

## BETTER HOUSING IN CANADA—THE ONTARIO PLAN.

FIRST ANNUAL REPORT OF THE TORONTO HOUSING COMPANY, LIMITED,  
1913.

Canada should do more than banish the slums. The old countries are doing that. Society is responsible for the slums and society must pay for their removal, which will require something in the nature of a surgical operation on the body politic.

But better housing has a far wider application than the slum problem. It means better living conditions for the great masses of wage-earners, and will bring with it a toning up of our whole social and industrial system. Enabling legislation will be necessary in every province. We, in Ontario, have made a beginning, and the results set out in this pamphlet, obtained under an Act passed this year, would indicate that we are on the right track.

I agree with the statement that every Canadian workman of steady habits should be able to own his home. The advantage is as much to the state as to the individual, for the home must always be the starting point for strengthening and elevating the social conscience and the national life.

W. J. HANNA.

The Provincial Secretary's Office,  
Parliament Buildings, Toronto.

## THE TORONTO HOUSING COMPANY, LIMITED.

Patron—His Royal Highness the Duke of Connaught.

Honorary President—Sir John Morison Gibson, K.C.M.G., Lt.-Governor of Ontario.

## Officers:

President—G. Frank Beer.

Vice-presidents—Thos. Findley, G. R. Geary.

Treasurer—G. T. Somers.

## Directors:

Alexander Laird, Mrs. H. S. Strathy, Miss S. K. Currie, Thos. Roden, A. R. Clarke,  
Mrs. A. W. Grasett, Dr. Helen MacMurchy, J. C. Scott, Arnold M. Ivey, Edward  
Kylie, Controller J. O. McCarthy.

Advisory Board—Sir Edmund Osler, J. W. Flavelle, Z. A. Lash, K.C.

## Consulting Board:

Architect—Eden Smith; Engineers—C. H. and P. H. Mitchell; Landscape architects—Dunington-Grubb and Harries.

Secretary—W. S. B. Armstrong, Continental Life Building.

## ADDRESS OF THE PRESIDENT.

The work of the Toronto Housing Company during the first year of its active operations has been chiefly to get a clear understanding of its mission and to form, as far as possible, a well defined plan for its field of operations. The problem of



housing is so many sided it is not to be wondered at that the members of our Board took some time before seeing eye to eye as to the portion of the problem deserving of our first undertaking.

This report will briefly review what has been done, outline our immediate programme, and suggest some of the yet untouched fields of usefulness requiring serious consideration.

Our accomplishment is not all that we hoped for. Unforeseen difficulties and unavoidable delays caused the loss of several valuable months, and it was not until the early months of this year that a better understanding of our aims and a wider sympathy with our proposed work paved the way for the carrying out of any important building operations. This time, however, was not wholly wasted. Plans of finance were carefully thought out, the experience of housing companies in Great Britain and United States was further thoughtfully studied, and the needs of our own city more thoroughly ascertained.

#### GOVERNMENT CO-OPERATION.

Representations were made to the Ontario Government as to the desirability, indeed the urgency, of the Government showing its interest in the housing problem facing practically every municipality in the province. As is now well known, the Hon. Mr. Hanna immediately took a great interest in the whole subject, and with our co-operation a Bill was framed and later on enacted by the unanimous vote of the Ontario Legislature that provides a way by which all the cities and towns of Ontario may to a large extent solve the problem of providing houses at moderate prices for their people.

Several important principles underlie this legislation.

1. The first of these is that where private initiative fails to provide an adequate supply of a pressing necessity the Government, as representing the whole of the people, should and will lend its assistance to supply the need.

2. The principle of encouraging the voluntary co-operation of citizens with the Government in solution of social problems.

3. The desirability of leaving the administration of such enterprises in the hands of specially constituted bodies.

4. In undertakings which by their nature create a value which is the direct result of Government co-operation such value (after providing for the repayment with interest of the private capital employed) shall belong to and be employed for the benefit of those co-operating. In the case of our Housing Company, the co-operators, outside of those supplying the capital, are the city, through its guarantee of the bonds, and the occupants of our houses.

These substantially were the principles Mr. Hanna required should be embodied in the Act, if the Government were to lend its encouragement and assistance to housing enterprises. The result is that no legislation could be better adapted to meet the present situation in Ontario than that recently passed by the legislature.

Very shortly after the passing of this legislation the city council of Toronto, by a practically unanimous vote, authorized the guarantee of bonds to the value of \$350,000, for the purposes of the company upon the basis of \$150,000 being provided by the company. A few days later this by-law received the approval of the Provincial Board of Health. The vote of Toronto ratepayers was therefore not required. As you are aware, shares to the value of \$100,000 only have as yet been subscribed for, so that \$50,000 additional must be provided to entitle us to the full amount authorized by the council.

#### LAND ACQUIRED.

Our first purchase of land was from the city, some five acres, fronting on Logan avenue. From the nature of the land a carefully planned development of the whole area was necessary to prevent it becoming an eye-sore to this section of the city.



Opposition to the plans we first considered and still consider wisest prevented us proceeding with building operations during 1912. Our present plans for this land have, however, been approved by the city council and we will spend in all over \$400,000 on this development and house 200 families.

Your board carefully considered many types of houses and finally adopted a style of self-contained cottage flats with pleasing and varied elevation. In this we were able to benefit from the experience gained from our Spruce street buildings as to the requirements of our tenants and as to architectural details. Other features of the development are a central heating plant, a supply of hot water for domestic purposes, and large grass courts for the children of our tenants. In this we were influenced by a desire to effect all economies possible and at the same time to lessen the labour of the house-wives occupying our buildings. The lady members of our board gave valuable assistance in planning these houses.

#### SPRUCE COURT.

While our plans for the land above referred to were being held up we leased from the General Hospital Trust a block of vacant land facing on Spruce street opposite the old general hospital. On this land we have spent \$55,000 providing homes for 38 families. The type of buildings and general plan of development are practically the same as that referred to in connection with Logan avenue. These houses are now ready for occupancy and applications have been received for double the number of tenancies. Not only were they over applied for but when the building construction had proceeded far enough to indicate with some clearness the plans of the flats, keen disappointment was expressed by the applicants for whom we were unable to provide. There seems no reason to doubt th at the type of residence and interior arrangement of our houses will prove exceedingly popular.

#### NORTHWEST LAND.

We have purchased 685 feet of land near St. Clair avenue in the northwest of the city and plan to spend there in all about \$100,000. The lots are deep and a bowling green for the occupants of the houses will form one of the features of this development. It may be found desirable in this locality to build selfcontained houses so that if thought wise, and if the demand arises, we may sell them upon easy terms of payment to those desiring and able to acquire their own homes.

This completes the list of the work already entered upon within the city limits, the whole involving an outlay of over \$550,000.

#### SUBURBAN DEVELOPMENT.

A suburban development upon co-partnership lines has always been hoped for by those most active in organizing the Toronto Housing Company. The success of housing under this plan has been demonstrated many times in England, and in proportion as the price of land in cities becomes excessive, it inevitably follows that such a development is necessary.

Shortly after this company was organized an opportunity offered to purchase 200 acres of desirable land situated between Danforth and Eglington avenues in the north-east district adjoining the city. The price was attractive and was possible only for a quick purchase. As the land was two miles from the existing city limits and without adequate transportation facilities, it was not considered wise to assume the responsibility of purchase with the probability of having to wait some years before building at this point would be advisable. At the same time it was considered that the low price made the purchase a very desirable one. Five of our shareholders after learning of the situation agreed to advance the money necessary to acquire the land, accepting a lien upon it as the only security for the loan. To enable the company to retain the

property, a portion of it has been sub-divided and sold. The company has been under no financial responsibility and we have an equity of large value in the remainder of the land.

It is the desire of your board to develop this land (together with the one-third disposed of) upon the lines of a garden suburb as soon as satisfactory transportation is secured. We hope the Hydro-Electric Commission of Ontario will locate the route of their Eastern Suburban Trolley Line through the property. This would practically assure the speedy development of the district and be of far-reaching value as demonstrating the power now in the hands of cities and municipalities to solve their pressing problems of housing and town planning.

In fact the actual carrying out of what is now made possible by Ontario's Housing and Transportation Legislation would be of world-wide interest and *The Ontario Plan* would be referred to wherever a serious study of these problems was undertaken.

Most important of all, however, is the demonstration here made possible of what people may do to help themselves when the Government by wise legislation provides assistance without dispensing charity and guidance without destroying personal initiative and public co-operation. This indeed is legislation of a high order framed upon principles which develop public spirit and inspire public service.

To develop the suburban land now owned by the company we will require not less than \$1,000,000. The city of Toronto so far is only co-operating with us within the city limits. A plan of finance for this suburban undertaking is one of the tasks ahead of the company. That it may be successfully met and prove of great value to Toronto and Canada I earnestly hope.

#### THE FUTURE.

In all the work planned up to this date we have endeavoured to realize a living condition and environment worthy of Canadian citizens and of which we hope all Canadian citizens may ultimately be able to avail themselves. Building at a lower level might lend itself to establishing or perpetuating a condition neither desirable nor productive of lasting advantage to the community. A less desirable development may be justified, the conditions of thousands of our citizens being what it is. I would strongly urge, however, that for every dollar spent in providing housing accommodation of a less desirable type than we have yet planned, two dollars should be spent by the city, province or Dominion (or by all combined) in seeking, finding and remedying the causes that have brought about that lower level of living. It will be a lasting discredit to Canada if we permit the reproduction here of the evils from which the countries of the old world are suffering.

Many suggestions as to fields of usefulness have reached us. Of these one which your board consider especially worthy comes from a gentleman well known to all citizens of Toronto for his benevolence and public spirit. This suggestion is that our company provide a building for women workers living away from home where they would have the advantages of reasonable rent and pleasant social environment. The tenants might furnish their own rooms, and so long as they desired this building would afford a permanent residence and be to them a home.

A suggestion from Controller McCarthy that the company provide a building which would be at the disposal of the Medical Health Officer has not yet reached us officially from the city council. The idea is that when the Medical Health Officer finds houses unsanitary he can have the family removed to one of our houses while the landlord is putting his house in order. As there are few or no houses available for such cases at the present time the work of improving existing conditions is hampered. If houses were available for such tenants the Medical Health Officer could and would placard houses until they were rendered fit for occupation. The suggestion seems a practical and wise one and will receive the careful consideration of the board when the matter comes before it officially.

From another leading citizen, one well acquainted with many phases of social work, came the suggestion that the company acquire from the city the waste and

unsightly ends of city parks which in a number of cases abut the rears of adjoining houses. This seems to us a wise proposal for many reasons. Such land is at present waste. If developed along desirable lines, it will mean the adding of an attractive feature to the parks referred to, the housing centrally of many who from their work especially need down town houses, and the city will receive from the company in payment for the land a sum which will prove of assistance in improving the parks and adding to their attractiveness and social value. The whole matter is now receiving the attention of the city council and we hope something of value to the city and company may result from the proposal.

In this connection it should be stated that it is not our object, nor is it financially possible for the company, to meet the existing demand for small houses. The most we can do is to relieve the pressure at a point where it will be of most value. We hope too that private enterprise will adopt some if not all of the ideas we are endeavouring to realize in our forms of development. This has been the experience in other countries where housing companies such as ours have been in operation. Our company being conducted upon strictly business principles, private enterprise is not prevented from finding profitable investment upon similar lines. Rather, we indicate a way which, in our judgment, is safe and attractive.

From the outset our efforts have been watched with friendly interest by the other cities and towns of Ontario. A conference of representatives from leading centres was held at the city hall, Toronto, last fall when the details of the Bill, afterward enacted by the Ontario Legislature, were carefully discussed. The problem in Toronto appears to be repeated to a greater or less degree in every town and city in the province. It is gratifying to know that housing companies in other cities are already or are soon to be formed under the provisions of the Government Act.

Many inquiries as to our organization and plans have reached us also from cities and towns in other provinces—notably Montreal, Quebec and leading western towns. We have supplied freely all the information asked for accompanied by copies of the Ontario Housing Act. A copy of our charter has also been supplied where requested.

#### A CENTRAL BUREAU.

It would appear to be highly necessary to establish a central bureau to which all the cities and provinces may apply for information and assistance in the cause of housing reform. This bureau would prove of great value in co-ordinating the different movements now taking place throughout all Canada. By applying the experience of each for the benefit of all, much may be done to lessen the labour of those giving freely of their time in this direction. Such a bureau, I believe, could best be organized as a department of the Public Health Section of the Conservation Commission. With Sir Edmund Osler as chairman, it would be influential and efficient and the great forward movement of better housing would receive timely and invaluable assistance. There are citizens in every locality with the good-will, but who require advice and assistance to enable them to put their good-will to practical use.

#### THE FOREIGN PROBLEM.

It has been truly said that America is the melting pot of the world. People of all countries are seeking here, some an easier, others a broader, but all a more human life than the old countries of the world afford. They do not come here to idle. They are clearing our forests, building our railways, digging our mines, and in many other ways bearing their full share of the heavy work called for in our country's agricultural and industrial expansion. These people are not different from ourselves, except in the lesser opportunities they have had for development of mind and soul. They are cheerful, virile and in the main thrifty. Given the right environment, with the advantages of education, they will become true and valuable Canadians. I can see neither prudence nor justice in giving these people no better chances than they



have to-day in Toronto to live in decent surroundings and healthful homes. It is not in the best interest of our city or our country that they should accept with cheerfulness or indifference a low level of living. At the present they form a menace to the health and morals of some localities and are said to affect injuriously the labour market. A better environment, better houses, better education and some human help can make of their children, sturdy, worthy citizens, bringing strength, endurance and talent as well to share in the great work ahead of us.

#### BUILDING FOR SALE.

For the present the chief duty of our Company is doubtless to build houses for rent. The City of Toronto requires many hundreds more of such houses as we have planned and unless private initiative supplies these the company will be pressed very hard by the demand to extend still further its operations in this direction.

There is a field, however, as yet untouched that deserves our earnest consideration. To many working men, their highest ambition is the ownership of their own houses. This is especially true where there are several children in the family. To give to these some permanent shelter against future possibilities of unemployment, illness or other disability every possible economy will be exercised and every nerve and muscle of the parents unsparingly used. In a country as generally prosperous as is Canada the ownership of his own house should not be an unrealizable ideal for a Canadian workman of steady habits. We are in a position to build at a less cost than the workman can and a plan of finance could with little difficulty be worked out by which within 15 to 20 years the worker would own his home by a monthly payment little in excess of his present rental. Life Insurance to cover the unpaid portion of the loans so made may be found necessary. This arrangement would give workmen who are heads of families a comfortable sense of security.

That there is a demand for such help as this would give is abundantly proven by the requests already before your Board. A field of usefulness of far-reaching value to Toronto would be open to us if the sum of \$50,000 were placed at our disposal by private investors for this special purpose. This sum would enable us to borrow \$275,000 on mortgage bonds and so place at our disposal in all \$325,000. As repayments of capital are made monthly the plan once in operation would finance itself, the same capital being used over and over again. It is greatly to be wished that this beneficent phase of a broad housing policy could be carried out. I cannot but believe that much vacant housing land within the city limits is at present unused owing to difficulties of financing building operations. A safe plan could be worked out if the initial capital were provided.

In this connection I venture to express a hope for the many to whom the ownership of their own home would appear at present to be an impossibility. If the company were in a position to supply small houses of very moderate price by monthly payments little in advance of rental, would it not develop a desire for ownership among many who now spend their small surplus earnings unproductively? Their present hopelessness results in no serious effort being made to save. This at least is sure: an increased incentive to save would be provided from which we might reasonably hope to have good results.

It might also be hoped that some of the money now invested in highly speculative enterprises, frequently resulting in large loss to the investors, would be attracted to this form of investment. The high profits held out as inducements to small investors are frequently imaginary, while the safety and increasing value of such an investment as we would provide is apparent.

#### LEGISLATION.

Toronto is fortunate in having a capable and zealous Medical Health Officer in Dr. C. J. Hastings. It has not therefore been necessary for the Housing Company to

give any attention to Legislation affecting tenements, slums, etc. We are pleased to afford any help we can in furthering the plans formed by Dr. Hastings and have been grateful for his interest and help in the work planned by this company.

#### ADMINISTRATION.

We recognize the necessity to conduct our business upon strict business principles. The rentals payable in advance are estimated to cover cost of up-keep, taxes, insurance, interest on bonds, interest on shareholders' capital, and to provide a sinking fund to retire all the bonds in 40 years. The whole of this rental is collected in 11 months of the year. A proportionate rental for the twelfth month is also collected but this is rebated to our tenants if upon examination of their premises it is found that everything has been kept in good repair. The amount of the rebate is conditional upon the cost to the company of internal repairs. Exterior up-keep is included in the rental collected within the eleven months.

Any further information as to methods or cost of administration will be freely given to shareholders interested.

Your Board desire at this time to make particular mention of the help and sympathy at all times during the year shown by His Worship Mayor Hocken, the Board of Control and members of the city council.

It is with the greatest satisfaction also that we refer to the appointment of an advisory board consisting of Sir Edmund Osler, Mr. J. W. Flavelle and Mr. Z. A. Lash, K.C. Their help already has been and will continue to be of great value to the work we all have at heart.

In conclusion I desire to express my warmest personal thanks to the members of the board for their hearty co-operation and cheerful willingness at all times to share in the work of furthering the objects of the company. Much time has been given to the many questions calling for attention. From others outside our board invaluable assistance has also been received. I gratefully acknowledge my debt to all and especially to His Honour Sir John Gibson, Mr. Z. A. Lash, K.C., and Sir John Willison.

G. FRANK BEER, *President.*

#### THE HOUSING PROPAGANDA.

"This is not a company; it is a Cause." This statement made recently by a shareholder of the Toronto Housing Company aptly explains the company's existence. It expresses the point of view of each one of the 166 shareholders who together have advanced \$100,000, an average of \$600 each, to assist in the solution of a problem that vitally concerns both the community and the nation—better housing of the working people. To achieve this broader purpose the Board of the Toronto Housing Company have extended the scope of their work so that the record of the Toronto Housing Company, as such, is not a complete measure of the progress that has been made since the Civic Guild in July, 1911, appointed Prof. Edward Kylie chairman of a committee to consider the question of better housing. About the same time Dr. Charles J. Hastings, medical health officer, presented his report of a survey made of six run-down areas in the city, comprising in all 4,696 houses and 26,413 persons. Among the results tabulated were the following:—

Number of houses unfit for habitation . . . . .	390
Number of houses with two or more families . . . . .	2,137
One-room dwellings . . . . .	198
Two-room dwellings . . . . .	411
Three-room dwellings . . . . .	646



In comparison with conditions in other cities, the facts revealed by Dr. Hastings' inquiry were not alarming, but they showed a disquieting tendency toward slum development. The condition, however, which created most public opinion in favour of some form of active effort for the alleviation of the housing situation was the abnormal increase in rents. Twenty years ago the average working man's house of six rooms rented for from \$12 to \$16 a month. To-day a moderate rent for such a house is \$25. The average wage is still considerably under \$15 a week. The result is that a large proportion of the families who pay rent live in a portion of a house.

From the first the object of the company was not to rehouse the slums, nor was it to meet the demand of any class for housing accommodation; it was to seek a solution for the whole housing problem. Two things were deemed essential—a constructive undertaking in Toronto and a nation-wide propaganda for better housing. Substantial progress has been made with the building program in Toronto, and much work has been done in furthering the general propaganda.

Consciousness of the need of organized effort for the improvement of housing conditions was aroused in most of the cities of Canada by Earl Grey and Mr. Henry Vivian, whom Earl Grey invited to visit the Dominion. To carry on this propaganda and to assemble and distribute necessary information, a Canadian Housing Association was from the first considered necessary by the Board of the Toronto Housing Company, which it is to be remembered was the only housing undertaking in operation in the dominion. With a view to bringing about such an organization it was decided last year to ask the Dominion Government to invite Mr. Adams, the housing and town planning expert of the Local Government Board of England, to visit Canada, confer with the Provincial Government in regard to necessary legislation and address meetings in the principal centres of population. This work came naturally within the province of the Health section of the Commission of Conservation. A petition to Sir Edmund Osler, chairman of this section, asking that Mr. Adams be brought to Canada, was circulated throughout the Dominion and signed by influential people in practically all the cities and endorsed by a number of the Provincial Governments. As far as we were concerned the matter was entirely successful but some misunderstanding arose which necessitated postponement of the undertaking.

From the inception of the Company it was apparent that it would be necessary to secure legislation to enable the financing of housing undertakings on a scale sufficiently large to permit of success. The work under this head resulted in the passage of the Hanna Act, already dealt with by the President. This Act makes possible housing undertakings in every city and town in Ontario and in addition points the way to similar legislation in the other provinces of the Dominion.

Last fall the Secretary addressed the Canadian Club of Quebec. That was the beginning of a movement which has progressed so far that we are assured the Ontario Act will be adopted by the Legislature of Quebec this year.

The Secretary attended the Canadian Conference of Charities and Corrections in Winnipeg last month and addressed the conference on the work of the Toronto Housing Company. Before leaving that city he interviewed several of the leading financial and business men and received assurances that an effort would be made to secure the adoption of the Hanna Act in Manitoba.

Shortly after the adoption of the Hanna Act movements were started in a number of Ontario cities to organize housing companies under the provisions of the new legislation. In this connection the Secretary by invitation addressed meetings in Berlin and Galt.

Inquiries have also been received from Sarnia, Montreal, Winnipeg, Quebec, Hamilton, Medicine Hat, St. John, Dundas, Calgary, Edmonton, Ottawa, St. Catharines, Vancouver, Halifax, Kingston, Fort William, Windsor, Brantford, Hespeler, Renfrew. Indeed the Toronto Housing Company is now known throughout the Dominion and we are constantly in receipt of inquiries with regard to the work.

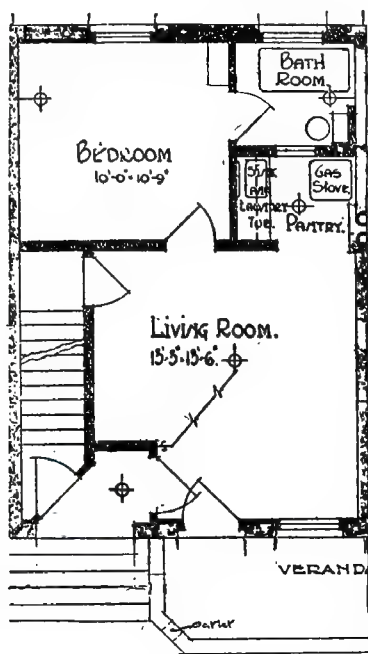
Inquiries addressed to the Provincial Government, City Officials and other local organizations regarding housing are usually referred to us for reply.

Considerable correspondence arises out of our connection with the National Housing Association of the United States and inquiries from American cities regarding our work. As an example, we recently received from the Homestead Commission of the Commonwealth of Mass., a list of questions covering two typewritten pages.

Another branch of this broader phase of the company's work is keeping in touch with the housing movement throughout the world in regard to legislation, methods of finance, plans of land and houses, methods of promoting the social welfare of tenants.

The following plans show the character of the company's development at Spruce Street and also at Bain Avenue, where construction is under way. The thirty-two cottage flats, which, with six six-room houses, comprise the accommodation at Spruce Street, are shown in the first and third illustrations, there being sixteen of each kind. At Bain Avenue, where there will be accommodation for about two hundred families, there will be cottage flats of all the types illustrated. The company has acquired land in the northwest section of the city, where it is expected to build self-contained houses, plans of which are also shown.

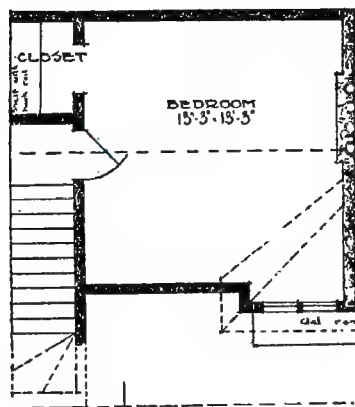
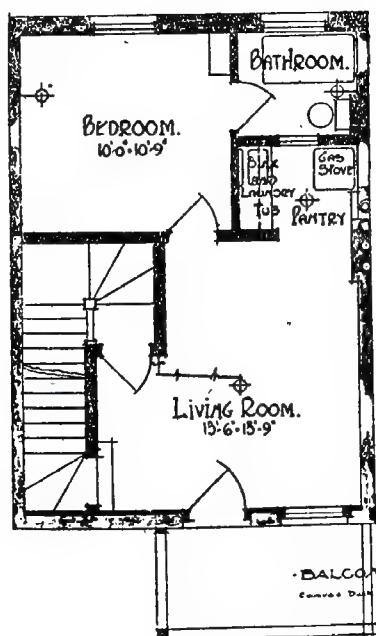
## COTTAGE FLATS



No. 1  
ONE BEDROOM

The smallest Flat

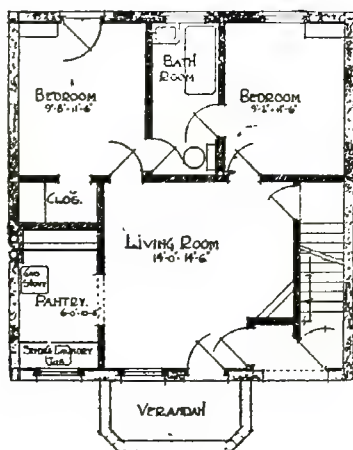
Of this type we have now 16 at Spruce Court, and 57 are under construction at Bain Avenue.



No. 2  
TWO BEDROOMS

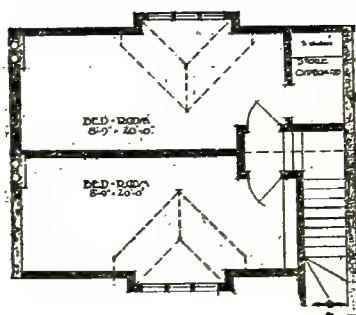
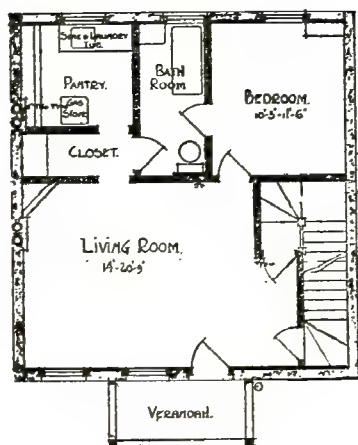
The smallest Flat and an Attic

57 of this type are being built at Bain Avenue.



**No. 3**  
**TWO BEDROOMS**  
 Next larger Flat

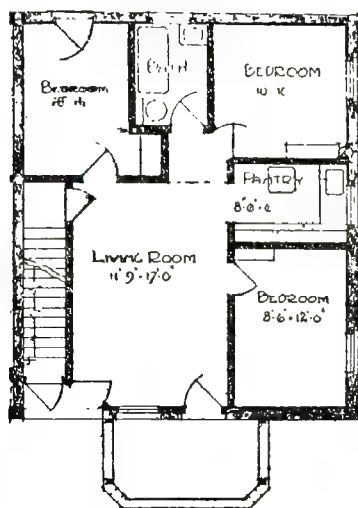
Of this type we have now 16 at Spruce Court, and 21 are under construction at Bain Avenue.



**No. 4**  
**THREE BEDROOMS**  
 Next larger Flat and an Attic

NOTE—One Bedroom added to the Living Room

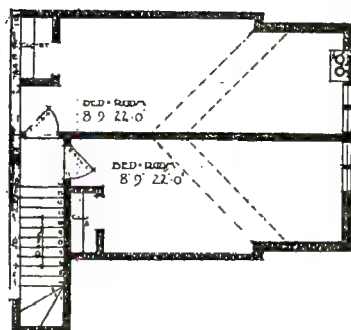
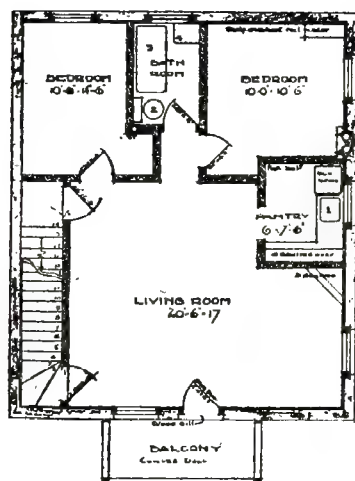
21 Flats of this type are being built at Bain Avenue.



**NO 5**  
**THREE BEDROOMS**

**Largest Flat**

26 of this type are being built at Bain Avenue.



**FOUR BEDROOMS**

**Largest Flat and an Attic**

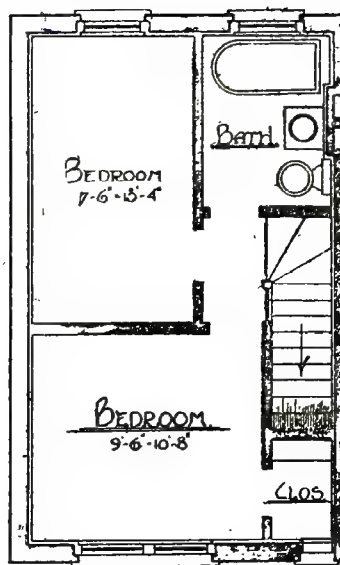
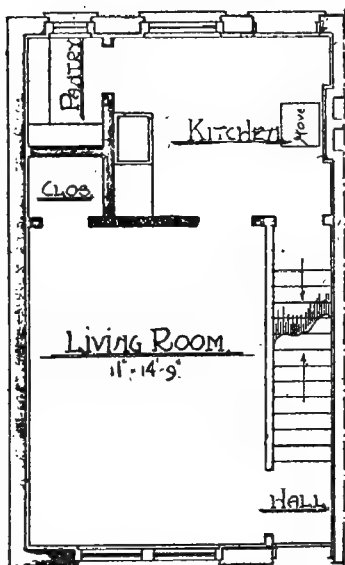
NOTE.—One Bedroom added to Living Room

26 of this type are being built at Bain Avenue



## SELF-CONTAINED HOUSES

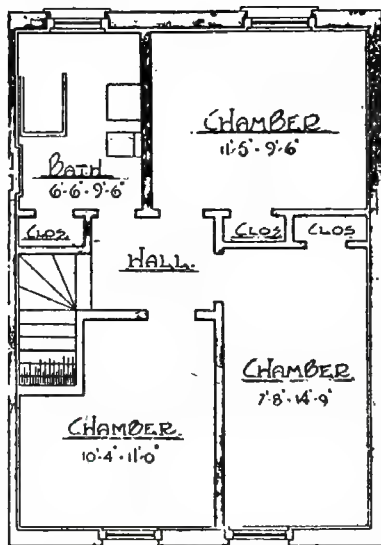
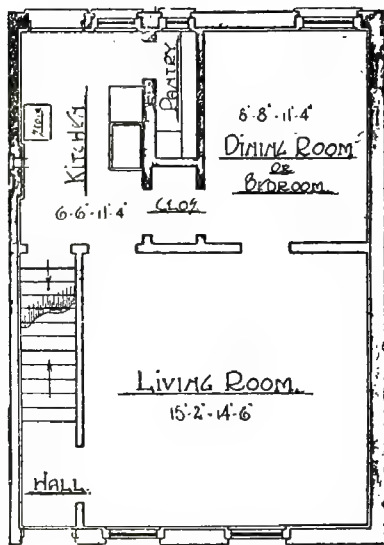
## TWO BEDROOMS



15'-6"

This house (outside measurement) is 15 ft. 6 in. by 26 ft.

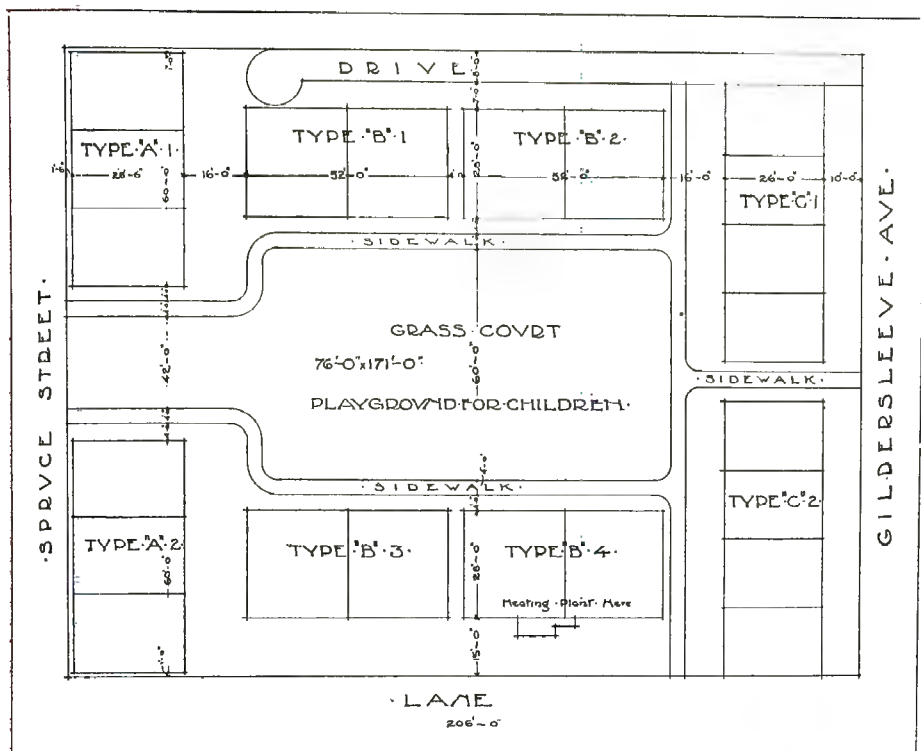
## THREE BEDROOMS



20'-0"

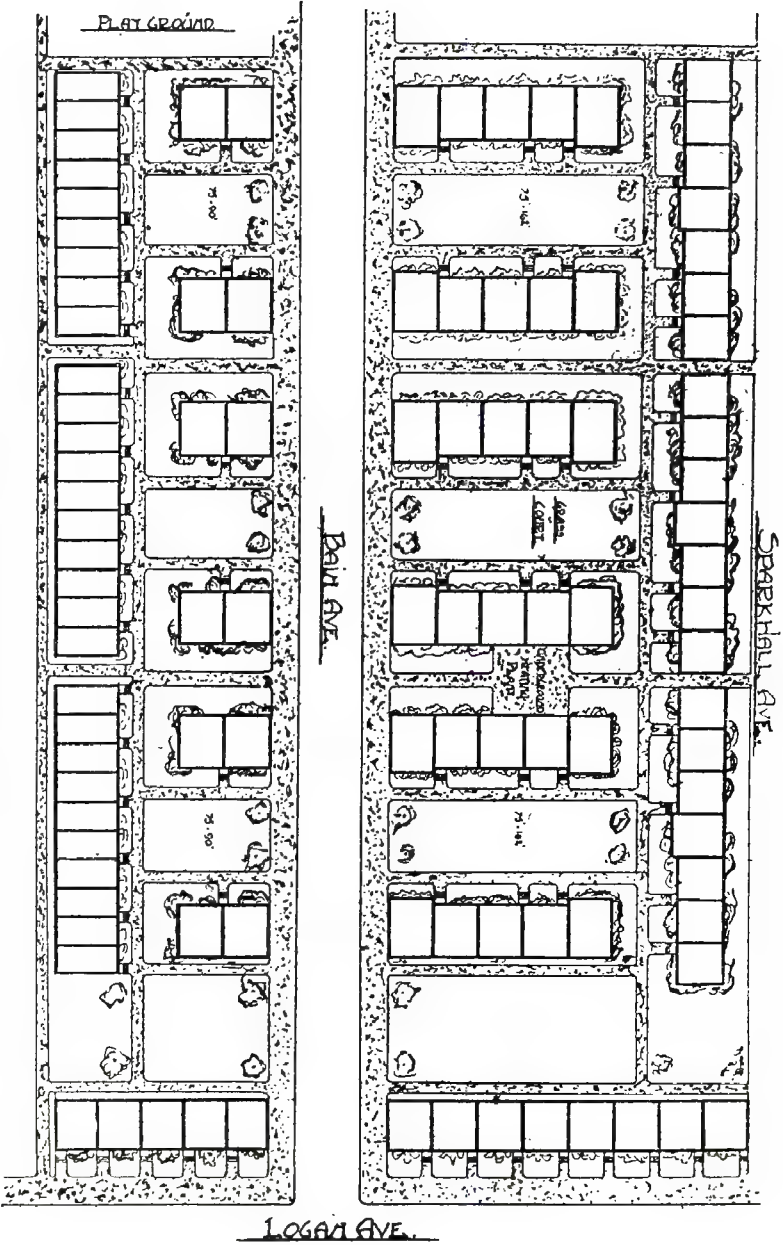
This house (outside measurement) is 20 ft. by 28 ft. 6 in.

## Ground Plan, Spruce Street.



Front Elevation of Building containing Four of the Largest Size of Cottage Flats, under construction at Bain Avenue.

GROUND PLAN, BAIN AVENUE.



## APPENDIX No. 38—Continued.

## COTTAGE FLATS AT RIVERDALE COURTS.

THE TORONTO HOUSING COMPANY, LIMITED.

Patron—H.R.H. Duke of Connaught, Governor-General of Canada.

Hon. President—Sir John Gibson, Lt.-Governor of Ontario.

President—G. Frank Beér.

Vice-presidents—Thos. Findley, J. C. Scott.

Treasurer—G. T. Somers.

Advisory Board—Sir Edmund Osler, J. W. Flavell, Z. A. Lash, K.C.

Directors—Alexander Laird, Mrs. H. S. Strathy, Miss S. K. Currie, Thos. Roden, A. R. Clarke, Mrs. A. W. Grasett, Arnold M. Ivey, Edward Kylie, Miss Grace T. Walker, C. V. Massey, J. O. McCarthy (Controller), James Simpson (Controller), Walter Harland Smith (Alderman); Secretary, W. S. B. Armstrong; Assistant Secretary, Miss P. C. Wilson.

## INTRODUCTION.

The Toronto Housing Company was organized two years ago after eight months of study and investigation by a joint committee representing the city council, the civic guild, the Manufacturers' Association and the Board of Trade. The object of the company from the beginning was not to build a few, or many, houses, but to seek a solution for the housing problem. A first step in this undertaking, it was believed, was a comprehensive building programme for Toronto. That was why it was decided to form a company instead of an association, the conduct of business necessitating capital and incorporation. Legislation was required and the Ontario Housing Act was secured from the Legislature, empowering cities and towns to guarantee the bonds of a Housing Company, organized to improve housing and not for profit, to the extent of 85 per cent of the money required, the remaining 15 per cent to be provided by citizens who through desire to be of public service could be induced to become stockholders.

A couple of weeks after the Ontario Housing Act became law the city council, almost unanimously, authorized the guarantee of the company's bonds to the extent of \$850,000. This, with \$150,000 of capital to be provided by the stockholders as required furnished \$1,000,000 for an initial building programme. Under the Housing Act the Council exercises close supervision of the Company's undertakings. The Council must approve the sites, plans and method of financing, and appoints three representatives on the Board of Directors.

The Company purchased from the City the Bain Avenue property comprising 2,050 feet of frontage. Bain avenue is fifteen minutes by street car from downtown. The Housing Company's property is only one block from the car. Opposite the property on the east side is Withrow Park, an improved play-area of 18 acres, with toboggan slide and skating pond in winter, tennis courts, bowling lawns and ball grounds for summer. A block away to the West is beautiful Riverdale Park with the largest play spaces in the city. At the corner of the property is a large public school.

A block on Spruce street, 167 feet by 204 feet, was leased from the General Hospital Trust. This property, now Spruce Court, is just west of Riverdale Park.

In the northwest section of the city a block of land with 685 feet of frontage on Rockwell, Prescott and Blackthorn avenues was purchased. On it the Housing Company is planning to erect this fall self-contained houses, for sale on easy terms.

The company has also acquired for development as a garden suburb 200 acres north of St. Clair Avenue east.

After very careful consideration the Housing Company decided that it should first build in the city rather than in the suburbs, and that the most useful and approved type of accommodation was the cottage flat.

A cottage flat is a modern apartment with its own front door to the street. The Bain Avenue buildings of the Toronto Housing Company are arranged around three grass courts. There the small children will have ample room to play, where their parents can see them, and away from the dangers and dust of the street. Each building consists of from two to nine houses; each house contains two cottage flats, one downstairs and one upstairs, that is one on the ground floor, one on the first and second floors. The entire development is to be heated by steam from a central plant and the same plant will furnish hot water to every flat the year round. There are no dark or poorly ventilated rooms, because the buildings have a wide frontage, and are only two rooms deep, so that every room opens to the air and sunlight. Each flat has its separate bathroom, separate balcony or verandah and separate basement. Gas stoves, electric fixtures and window blinds are installed by the company. In every kitchen there is an enamelled combination sink and laundry tub.

The cottage flats at Riverdale Courts are finished in Georgia pine. This is stained in the living rooms and finished in natural colour in the other rooms. Most of the floors are hardwood. The architectural design of Riverdale Courts has been approved by many leading authorities of Great Britain and America.

At Spruce Court, which was constructed and occupied last year, there are thirty-two cottage flats and six six-room houses.

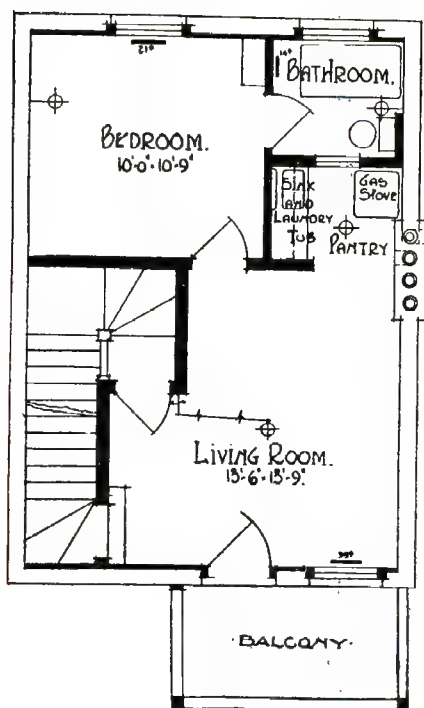
In the buildings nearing completion at Bain avenue there are 118 cottage flats and in the others under construction there will be 86. The flats are of six sizes and a floor plan of each is shown in the illustrations on pages 913 to 918.

The rentals are based upon the cost of the development and are as low as in the opinion of the company it is safe to make them. They include the charges for heat and hot water and a fixed sum for repairs. At the end of the year if no repairs are necessary the reserve fund for repairs is returned to the tenant in cash. If repairs are necessary they are made, the cost deducted from the repair fund and the balance is returned to the tenant. The company pays the taxes and water rates; the tenant pays for his gas and electric light and separate meters are installed for each flat.

The best guarantee of the character and permanency of the property is that the company remains responsible. Each applicant for a flat is required to furnish two references as to character and suitability. The rents are payable strictly in advance. The company was not organized for profit but for public service—to solve the housing problem. On the other hand, it is not a charity or a philanthropy, but dividends are limited to six per cent per annum.

Applications for flats should be made to the Housing Company at its head office in the Ryrie Building, Yonge and Shuter streets.





PLAN NO. 1.

The above floor plan shows the smallest of the Toronto Housing Company's cottage flats. It was designed for occupation by a young couple, possibly with a child under five years of age, or by an older couple whose family has grown up and left home. It fits exactly also the requirements of a mother and daughter or two sisters who, though working, wish to keep house in a home of their own.

The rent is \$14.50, \$15, or \$16 a month, according to location.

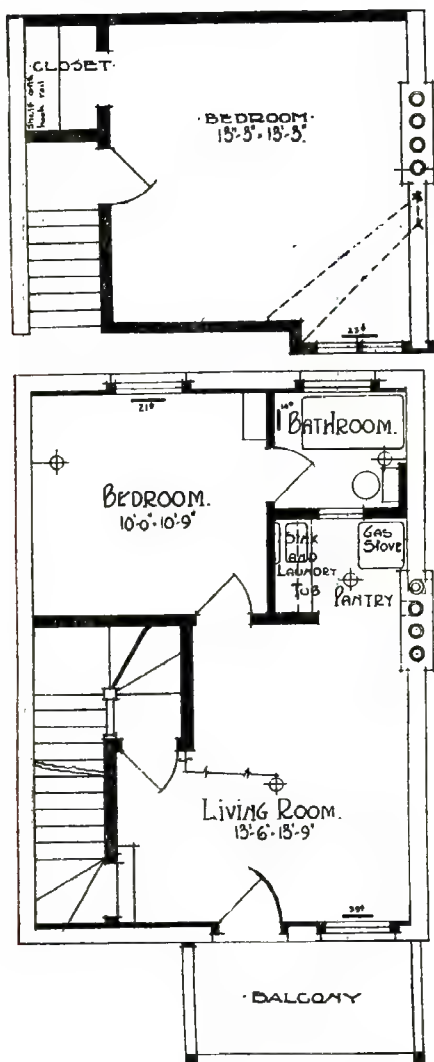
The rent includes heat, hot water all the year round, and reserve fund for repairs of \$12 a year, to be returned to the tenant at the end of a year if no repairs are necessary.

See diagram on page 920.

Nos. 11, 13, 15, 23, 25, 27, 43, 45, 59 and 61 (three courts) are \$14.50 per month.

Nos. 47 and 57 (three courts) are \$15 per month.

Nos. 17, 21, 49, 51, 53, 55 and 55½ (3 courts) are \$16 per month.



PLAN NO. 2.

This next largest cottage flat of the Toronto Housing Company at Riverdale Courts is the same as No. 1, with the addition of a fine large second floor bedroom and large clothes closet. With living-room, alcove pantry-kitchen, basement room, bathroom, veranda and two bedrooms, it provides self-contained accommodation for a small family wishing domestic privacy. All of these flats are upstairs, and each stair has three-way electric light switches at top and bottom. Each flat has its own front door to the street.

The rent is \$16, \$16.50, \$17 or \$18 a month, according to location.

The rent includes heat, hot water all the year round, and reserve fund for repairs of \$12, to be returned to the tenant at the end of a year if no repairs are necessary.

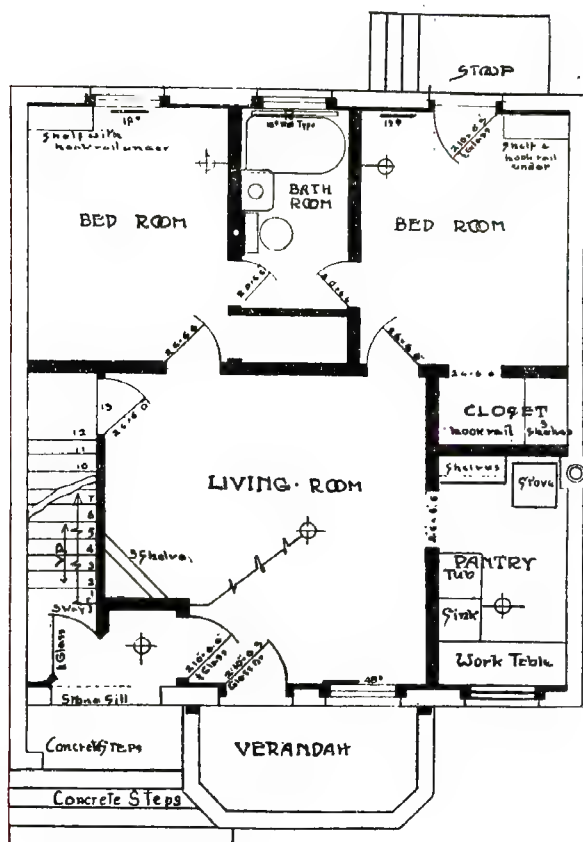
See diagram on page 920.

Nos. 12, 14, 16, 24, 26 and 28 (three courts) are \$16 per month.

Nos. 44, 46, 60, 62A are \$16.50 per month.

Nos. 18, 22, 48 and 58 (three courts) are \$17 per month.

Nos. 50, 52, 54, 56, 56½ are \$18 per month.



PLAN NO. 3.

Number 3 is another two-bedroom cottage flat, but larger than No. 2, and all these flats are on the ground floor. It has a large living-room, separate pantry-kitchen with gas range, combination sink and laundry tub, shelves and built-in worktable, basement, two bedrooms, two clothes closets, three-piece bathroom, front verandah and back-door stoop.

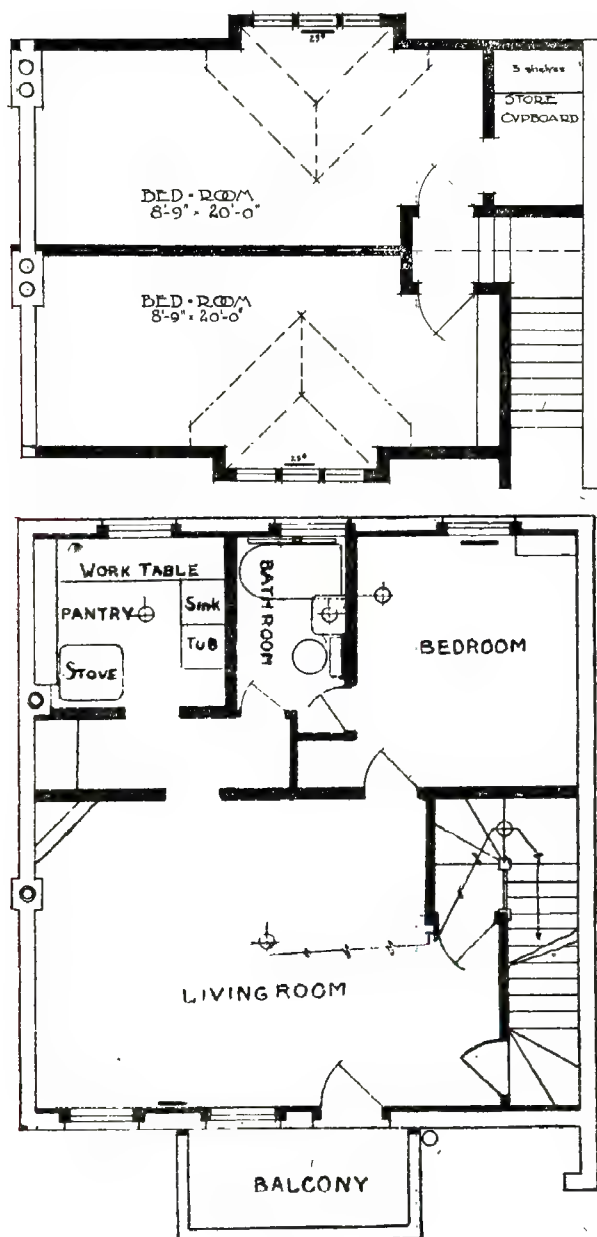
The rent is \$19 or \$20 a month according to location.

The rent includes heat, hot water all the year round, and reserve fund for repairs of \$12, to be returned to the tenant at the end of a year if no repairs are necessary.

See diagram on page 920.

Nos. 3, 5, 7, 31, 33 and 35 (three courts) are \$19 per month.

No. 19 (three courts) is \$20 per month.



PLAN NO. 4.

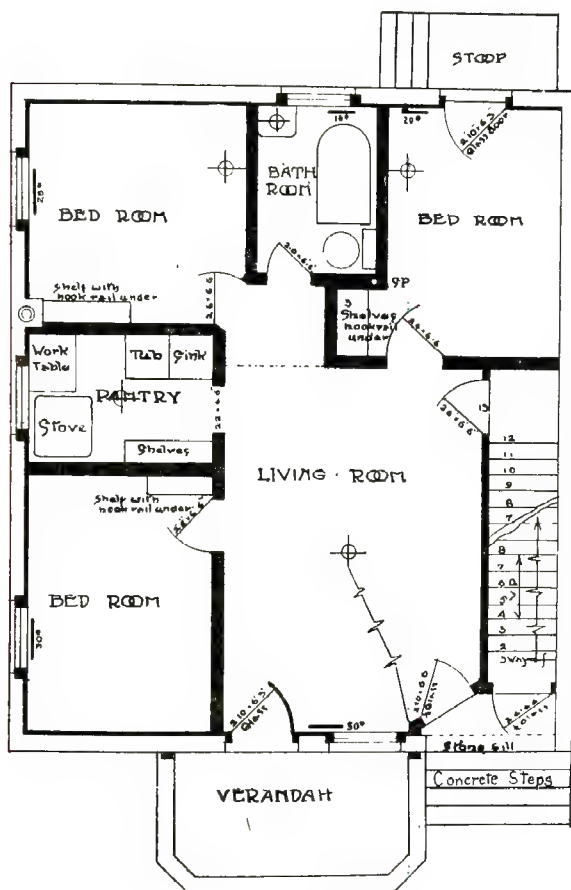
This is an up-stair flat and has two fine, airy bedrooms and trunk room or large clothes closet on the second floor. On the first floor there is a very large and attractive living-room, one bedroom, three-piece bathroom, pantry-kitchen, closets and balcony. Each flat has its own front door to the street and its separate basement room. Both stairways have three way electric light switches.

The rent is \$25 or \$26 a month according to location.

The rent includes heat, hot water all the year round, and reserve fund for repairs of \$18, to be returned to the tenant at the end of a year if no repairs are necessary. See diagram on page 920.

Nos. 4, 6, 8, 32, 34, 36, and 62 (three courts) are \$25 per month.

No. 20 (three courts) is \$26 per month.



PLAN NO. 5.

Number 5 is the largest of the ground floor flats. With large living-room, pantry-kitchen, three bedrooms, bathroom, veranda and basement it provides the accommodation of a six-roomed house.

The rent is \$23 or \$24 a month according to location.

The rent includes heat, hot water all the year round and reserve fund for repairs of \$15, to be returned to the tenant at the end of a year if no repairs are necessary.

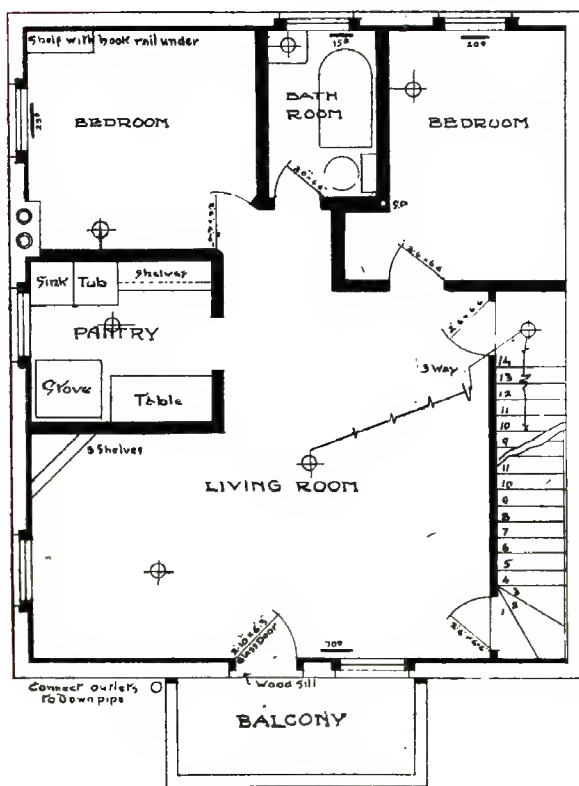
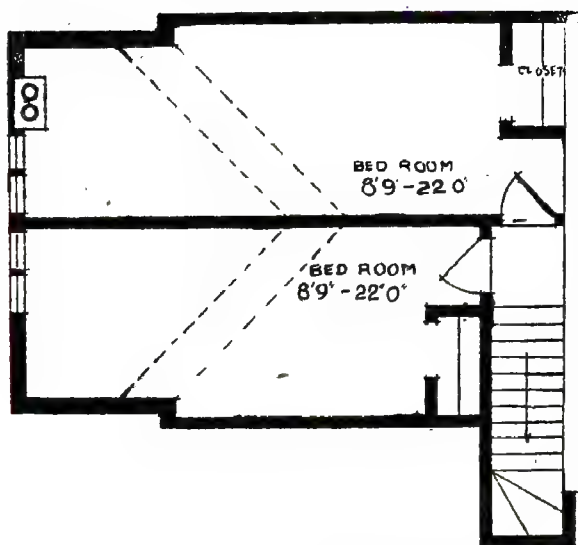
See diagram on page 920.

Nos. 9 and 29 (three courts) are \$23 per month.

Nos. 1 and 37 (three courts) are \$24 per month.

Nos. 39, 41, 63, 65 (three courts) have been leased to the Local Council of Women to be rented by them to business women.





PLAN NO. 6.

Almost any size of family can accommodate itself comfortably in this, the largest, of the Housing Company's cottage flats. It has a very large living-room, pantry-kitchen, two bedrooms, bathroom and balcony on the first floor and two large bedrooms,

each with a clothes closet, on the second floor. All of these flats are upstairs, and both stairways have three-way electric switches. Each flat has its separate basement room and its own street door.

The rent is \$28 or \$29 a month according to location.

The rent includes heat, hot water all the year round and \$15 as reserve fund for repairs, to be returned to the tenant at the end of the year if no repairs are necessary.

See diagram on page 920.

Nos. 10 and 30 (three courts) are \$28 per month.

Nos. 2 and 38 (three courts) are \$29 per month.

Nos. 40, 42, 64, 66 (three courts) have been leased to the Local Council of Women to be rented by them to business women.

Sparkhall Avenue

12	14	16	18	20	22	24	26	28		12	14	16	18	20	22	24	26	28
11	13	15	17	19	21	23	25	27		11	13	15	17	19	21	23	25	27

10	9									29	30							
8	7									31	32							
6										33	34							
5										35	36							
4	3									37	38							
2	1																	

73' x 163'  
Court. A.

10	9									29	30							
8	7									31	32							
6										33	34							
5										35	36							
4	3									37	38							
2	1																	

73' x 163'  
Court. B.

10	9									29	30							
8	7									31	32							
6										33	34							
5										35	36							
4	3									37	38							
2	1																	

73' x 163'  
Court. C.

Bain Avenue

39	40									66	65							
41	42									64	63							
43	44																	

79' x 76'  
Court. A.

79' x 76'  
Court. B.

93' x 76'  
Court. C.

43	45	47	49	51	53	55	57	59	61		43	45	47	49	51	53	55	57	59	61
44	46	48	50	52	54	56	58	60	62		44	46	48	50	52	54	56	58	60	62

DIAGRAM.

Riverdale Courts. The cottage flats in each of the three courts are numbered alike. Odd numbers indicate ground floor flats and even numbers first floor flats. In all cases the same numbers indicate flats of the same size and rentals.



Living Room, Larger Cottage Flat, Spruce Court, Showing Portions of Pantry-Kitchen, Bed-Room and Sitting Room.



Living Room, Larger Cottage Flat, Spruce Court.





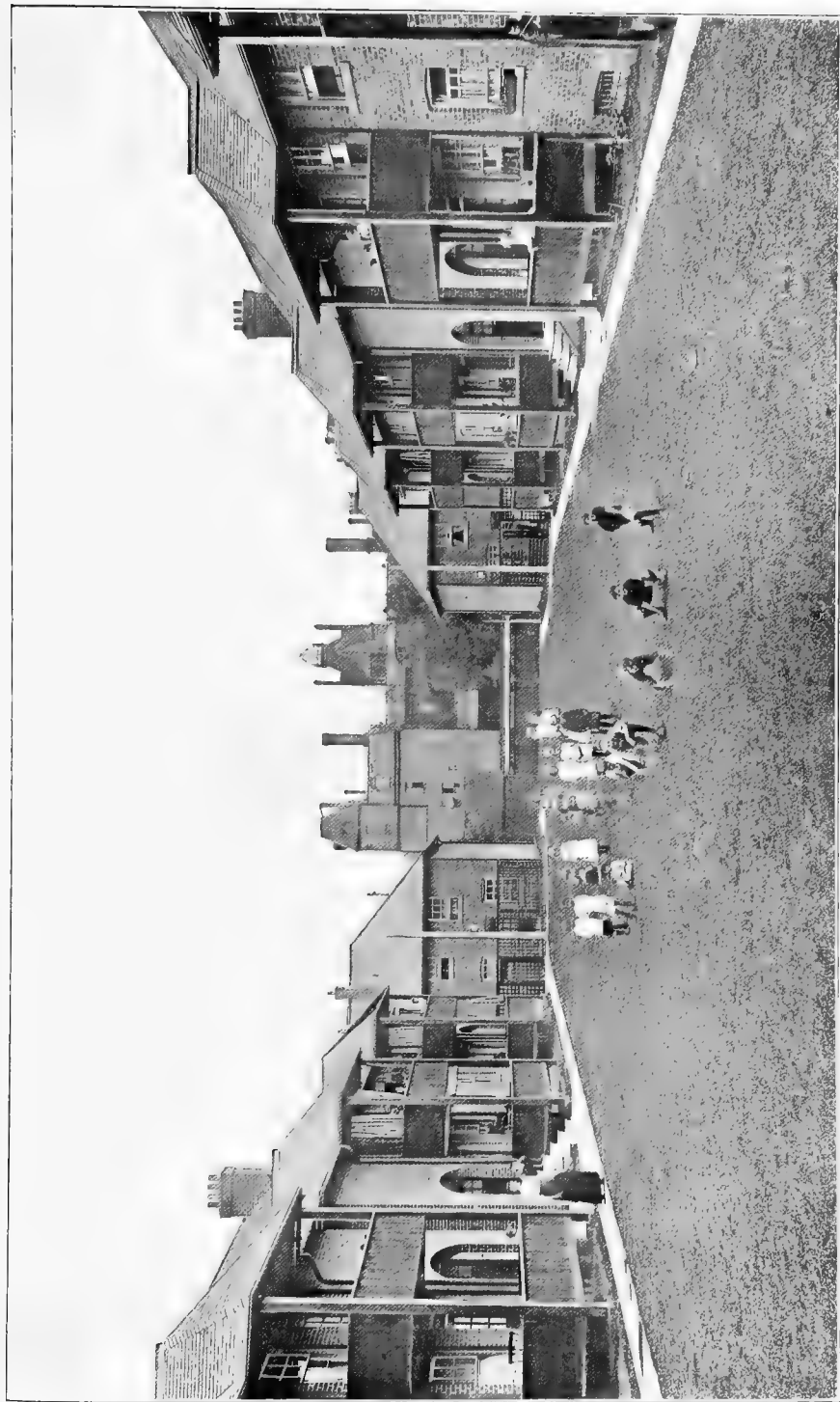


Living Room in Smaller Cottage Flat, Spruce Court, Showing Bedroom Beyond.



Another View of Living Room Shown above, Showing Portion of Pantry-Kitchen.





Spruce Court.  
Partial view of The Toronto Housing Company's Property on Spruce Street.





Riverdale Courts.  
Portion of one of the three Courts as seen from Bain Avenue.





## APPENDIX No. 38—Continued.

## CHAPTER 57.

*An Act to Encourage Housing Accommodation in Cities and Towns.*

ASSENTED TO MAY 6, 1913.

His Majesty, by and with the advice and consent of the Legislative Assembly of the Province of Ontario, enacts as follows:—

## 1. In this Act,

"Lands" shall include leaseholds;

"Securities" shall mean bonds, debentures, debenture stock, or other securities.

Interpretation.

"Lands."

"Securities."

2. A Company incorporated under The Ontario Companies Act, with a share capital whose main purposes of incorporation are the acquisition of lands in or near a city or town in Ontario and the building and making thereon of dwelling houses of moderate size and improvements and conveniences, to be rented at moderate rents, may petition the Council of such city or town to guarantee its securities, to enable or assist it to raise money to carry out such main purposes.

Petition of  
Company to  
Council for guar-  
antee of bonds.

3. (1) If the Council is satisfied that additional housing accommodation for those living or working in the municipality is urgently needed, and that the main purpose of the Company is to help, bona fide, in supplying such need, and is not to make profits, and that the Company, without borrowing the money required, over and above the proceeds of the guaranteed securities, for the housing accommodation in contemplation, will be able to provide the same, the council may, with the assent of the electors entitled to vote on money by-laws, pass a by-law authorizing and providing for the giving by the council of such guarantee to the amount and upon the terms and conditions hereinafter contained.

By-law for  
guarantee of  
bonds with assent  
of electors.

(2) It shall not be necessary to obtain the assent of the electors to the by-law if it is approved of by the Provincial Board of Health.

When assent of  
electors not  
required.

4. The council, or a committee thereof, shall, before the guarantee is given, approve of the location of the lands selected for the housing accommodation and of the general plans for the houses.

Approval of  
location of lands.

5. The securities to be guaranteed shall be secured by one or more deeds of trust by way of first mortgage or charge upon such lands as the council or committee may approve of, including the houses and improvements built and made or to be built and made thereon.

Mortgage  
securing bonds.

6. The kind of securities to be guaranteed and the forms and terms thereof, and the forms and terms of the deed or deeds of trust securing them, and the trustee or trustees, and the times and manner of the issue of securities, and the disposition of the moneys to be raised thereon by sale, pledge or otherwise, pending the expenditure of such moneys, and the forms and manner of guarantee, shall be such

Approval of  
forms of securi-  
ties, mortgages,  
guarantee, etc.

as the council or committee approve of; and such terms, provisions and conditions may be included in such deed or deeds of trust as the council or committee deem expedient or necessary.

Execution of  
guarantee.

7. (1) The guarantee shall be signed by the Mayor and Treasurer of the municipal corporation and upon being so signed the corporation shall become liable for the payment of the principal and interest of the securities guaranteed, according to the tenor thereof.

Authority to  
provide funds to  
meet guarantee.

(2) If the corporation becomes liable to pay any of such guaranteed securities, it may provide for the payment of the same out of the general funds of the corporation or by the issue of debentures payable within a term not exceeding ten years from the issue thereof, and it shall not be necessary to obtain the assent of the electors to a by-law providing for the issue of such debentures.

Limit of  
guarantee.

8. The total amount of securities to be guaranteed shall not in the first instance exceed 85 per cent of an amount to be fixed in the deed or deeds of trust as representing the value of the lands and housing accommodation and improvements to be built and made thereon, and the said deed or deeds may make all convenient provisions for the expenditure of additional moneys on the said lands and housing accommodation and improvements and for the acquisition of additional lands to be made part of the mortgaged premises and for expenditure thereon, and for the issue of additional guaranteed securities under said deed or deeds, but so that the total amount outstanding shall not exceed 85 per cent of the value of the mortgaged premises to be ascertained and fixed in the manner provided in such deed or deeds, and for the issue of such additional securities in advance of expenditure, and for the disposition of the moneys to be raised thereon by sale, pledge or otherwise, pending the expenditure thereof.

Appointment of  
one Director  
by Council.

9. The council of the municipal corporation which guarantees securities of the Company as provided for in this Act may from time to time appoint and remove one member of the Board of Directors of such Company, and in case of a vacancy in such membership by removal, death, resignation, or otherwise, his successor may be appointed by the council, and so on from time to time. It shall not be necessary for the appointee of the council to hold stock in the capital of the Company or to be otherwise qualified as a director.

Inspection of  
books of  
Company.

10. The books of a company whose securities have been guaranteed by a municipal corporation (hereinafter referred to as the "Assisted Company") shall at all times be open to inspection by any person named in that behalf by the council.

Limit of  
dividends.

11. (1) No dividend upon the capital stock of the Assisted Company or other distribution of profits among the shareholders shall be declared or paid exceeding 6 per cent per annum in any one year.

(2) Such dividend may be payable in installments during the year.

(3) If the sums paid in any year do not amount to six per cent, the deficiency, with interest, may be made up in any subsequent year or years.

12. (1) Any net profits received by the Assisted Company in any year, and not required to pay said six per cent or to make up a deficiency therein or for a reasonable contingent fund, shall be expended by the company in acquiring lands, improving its housing accommodation by way of new buildings, additions, extensions or other improvements, or in redeeming or getting in the capital stock of the company, as hereinafter provided.

Application of profits after payment of dividends.

(2) The High Court Division of the Supreme Court of Ontario shall have jurisdiction, upon the application of the Council of the municipal corporation guaranteeing the company's securities, to enforce by mandamus or otherwise the carrying out of this section by the Company, its directors and officers.

13. (1) The Assisted Company may, with the approval of the council of the municipal corporation guaranteeing its securities, pass a by-law providing for redeeming or getting in, upon such plan and terms and at such times as may be deemed best, the whole or part from time to time of the outstanding shares in the capital stock of the company.

Power to redeem outstanding shares.

(2) For such purpose any available moneys, whether representing capital or otherwise, may be used. Provided always that no greater premium than ten per cent shall be paid upon the redemption or getting in of any share. Provided that after five years from the first issue of guaranteed securities the company, at the request of the said council shall pass such by-law and any difference which may then arise respecting the terms thereof shall be settled by the Lieutenant-Governor in Council.

Moneys which may be used to redeem. **Proviso.**

14. Any shareholder may give or bequeath to the Assisted Company or to the Board of Trustees established under section 14, the whole or any party of his shares in the capital stock of the company, and the company may accept and hold the same until transferred to the said Board of Trustees.

Power of shareholders to bequeath shares to company.

15. The Assisted Company may, with the approval of the council of the municipal corporation guaranteeing the securities, establish a Board of Trustees to receive and hold the shares redeemed or got in or given or bequeathed to the company or to such board upon such trusts and for such purposes and with such powers as may be thought expedient in furtherance of the objects of this Act and as may be declared or provided for in the instrument establishing the Board. The successors of the said trustees shall be appointed in the manner provided for in said instrument. The company with the like approval may alter the terms of said instrument and add to or otherwise vary the trusts, purposes and powers therein mentioned. Provided that after five years from the first issue of guaranteed securities the company, at the request of the said council, shall establish such Board of Trustees. Any differences which may then arise respecting the terms of the instrument establishing the Board shall be settled by the Lieutenant-Governor in Council.

Establishment of Board of Trustees.

16. The share redeemed or got in or given or bequeathed to the company shall not become extinct but shall be transferred to and vested in the said Board of Trustees.

Redeemed shares vested in Board of Trustees.

17. The council of the municipal corporation guaranteeing the company's securities may from time to time furnish the company

Authority to furnish money to redeem shares.

with moneys to be applied in the redemption or getting in of shares from time to time under the terms of the by-laws above mentioned, and the company shall apply such moneys accordingly.

Stock to be sold  
only for cash.

18. No stock in the capital of the Assisted Company shall be sold or disposed of for any consideration other than cash, and moneys received by the Assisted Company on account of its capital stock shall not be used for expenditures other than those connected with the carrying out of the main purposes of the company, viz:—The acquisition of lands in or near a city or town in Ontario and the building and making thereon of dwelling houses of moderate size and improvements and conveniences, and the carrying out of the objects of this Act.

Power of Company  
to accept legacies,  
devises, etc.,  
9 Edw. VII, c. 58.

19. The Assisted Company may accept legacies, gifts and devises of personal and real property notwithstanding The Mortmain and Charitable Uses Act.



## APPENDIX No. 39.

## PRESS EXTRACTS AS TO COST OF LIVING IN FORMER TIMES.

From the *London Chronicle*.

The prices we shall pay for our Christmas fare would have made our ancestors gasp. About four centuries ago a good fat ox cost between 11s. and 12s., and a half century later the finest ox in England cost less than £2. A fine fat goose was to be bought in 1500 for 4d., but by the end of the century 1s. to 1s. 2d. was the price. Pigeons at the beginning of that century were to be got for three a penny, and eggs were sold not by the dozen or shillings worth, but by the hundred, and 6d. was the price. In "Stafford's Dialogue" of 1581 the knight says: "I could buy the best pig for 4d., a good capon for 3d. or 4d., a chicken for 1d., and a hen for 2d." But wages balanced prices, for a master mason got about 5s. a week, and a labourer about 4s. Wages and prices keep about together, with prices always a little ahead.

From the *Town and Country Magazine* for April, 1772.

It requires no rhetoric to prove that the housekeeper, who could but just subsist in 1757, must be on the point of starving in 1772. It is hoped this picture will have its proper effect on those whose province it is to redress the greatest of all public grievances.

## COMPARATIVE PRICES OF PROVISIONS.

	1757.		1772.	
	s.	d.	s.	d.
Beef, per pound . . . . .	0	3½	0	5½
Mutton, the best . . . . .	0	3	0	6
Veal, on an average . . . . .	0	3	0	5
Pork, on an average . . . . .	0	3½	0	5½
Butter, Epping . . . . .	0	10	1	2
Butter, fresh . . . . .	0	8	1	0
Butter, Cambridge . . . . .	0	9	0	10
Cheese, on an average . . . . .	0	3½	0	5
Candles . . . . .	0	5½	0	8
A quart loaf . . . . .	0	5	0	8½
	4	4	6	7½

SIR,—At this period, when not only the legislature, but individuals of almost every class, are engaged in endeavouring to lower the exorbitant prices of provisions (which are, indeed, arisen to such a pitch as to menace the very existence of the majority of His Majesty's subjects in this kingdom), it will doubtless be agreeable to many of your readers to find impartially stated in your magazine the different causes to which we must ascribe the evil. Much has been said against the grazier, the salesman, the carcase and cutting butchers, as if by monopolizing and forestalling cattle they had been the sole cause of the enormity respecting butcher's meat, so loudly complained of; but though they are certainly not without their share in promoting the distress, they are not the primary nor the greatest causes of it; the

original source of the disorder is to be traced farther back through various channels. I believe amongst the foremost of these causes may be ranked the uniting a number of small farms into one large farm. The little farmer was formerly obliged to bring his cattle to market at a moderate price, in order to make good his payments; whereas the opulent farmer, who does not depend upon the market of a day, or a week, can send up his cattle just as his agents inform him the demand is the greatest, and cattle at a price he chooses to sell at. The great farmer also neglects the rearing of poultry and fattening of hogs, as beneath his attention, which were before important objects to the little farmer, who supplied the markets with those commodities, and thereby kept down the prices of other provisions. The next most obvious cause of the present high price of provisions appears to be owing to the landholders throughout England having raised their rents in a very short time beyond anything similar that can be paralleled in six times the number of years preceding. Farms that were twenty years ago let at £200 are now let at £300, and many are still more increased in proportion. From this increase of rent it naturally follows that the farmer will raise the value of his cattle and enhance the price of corn, hay, etc., by every possible artifice, in order to make his farm as good as it formerly was; and this plan he is the more able to execute from the circumstances of his being possessed of so large a farm, and being admitted by his landlord as a tenant, from his known opulent circumstances. Inclosing of commons has certainly been of the most fatal tendency to the poor in the neighbourhood of these enclosures, as they could formerly graze a cow and a few sheep, etc., and thereby be in possession of such provisions, as they are now compelled to purchase at the public market at an enormous price, and thereby promoting the demand and increasing the nominal or real scarcity. The breeding of horses, which has now become a favourite pursuit of the farmers throughout the kingdom, and particularly in the extensive county of York, greatly increases the prices of grass, hay, corn, etc., and at the same time diminishes in the same proportion the feed of other cattle. This evil is still the greater, as our finest horses are now purchased to be sent abroad, which has enhanced their price so much as to make the breeding of them many farmers' sole pursuit. The effects hereof are sensibly felt in most parts of the kingdom, but in none more than in Yorkshire, that fruitful country, where, from this circumstance, they are compelled to purchase vast numbers of sheep in Lincolnshire and other counties. It must at the same time be allowed, that scarce crops of grain last year must have tended to increase the price of butchers' meat as well as corn; yet this deficiency would have operated but in a very small degree had the other causes been removed. To these primitive causes of the dearth of provisions must be added the killing of calves or lambs, and the luxury of the tables of the great, who frequently destroy for a single dish as much meat as would serve a large family two days. Having traced the sources of the evil through these different channels, let us now consider how far the dealers in butchers' meat, more immediately collected under the eye of the public, can be supposed accessories to the grievance. We cannot suppose a salesman would be employed by the graziers, who would dispose of his cattle at Smithfield, and therefore merits particular attention. The jobbers, who are a species of itinerant salesmen, purchasing at one market and driving to another, in order to get an advanced price for their cattle, are certainly greatly instrumental in keeping up the present high prices, and should not be suffered upon any consideration; and at the same time carcase butchers, who buy cattle in different parts of the country, and drive them up to town for their own use, without bringing them to a fair market, should have severe penalties inflicted on them, which should be employed for the uses of the poor. The cutting butcher seems to have the least share in the spoils, as from the late calculations made and the oxen bought and disposed of by societies and private gentlemen, it does not appear that they gain any exorbitant profits, considering their expenses and labour, with the losses they sustain, particularly in summer, by quantities of meat remaining

upon their hands. This leads us to consider the greatest grievance complained of against the cutting butcher, which is the destroying of meat which he cannot sell at the market price, a charge that has been supported by the strongest evidence, positive proof. It were needless to point out the benefits the poor might derive from purchasing this meat at a low price, and how much this must conduce to promote a real scarcity of provisions. From these considerations, this practice should be punished in an exemplary manner. From what has been said, which points out the principal causes of the present just complaint of the dearth of provisions, we may be enabled to form a judgment how far the evil may be remedied. The removal of the three first great causes (namely, uniting small farms into great, raising of rents, and enclosing of commons) is rather to be wished for than expected, as I fear we do not live in such times when a patriotic spirit prevails over self-interest, or when the good of the community will be preferred to the advantage of the individual. The breeding of horses is also a subject in which the advantage of the farmers is so immediately connected that unless the Parliament interferes, we cannot expect any redress in this particular. A stop may be put to the killing of calves and lambs for a limited time, but even the interposition of the above great power will not be able to stop the torrents of luxury that now so generally prevails. Monopolizing and forestalling may, by severe penalties and punishments, be prevented. Jobbers may be suppressed, and the cattle brought to a fair market; and the cutting butchers may, from the dread of corporal punishment, be deterred from destroying meat which they cannot sell at exorbitant prices. This seems the amount of all that can be done at present in favour of the poor, which united to the opening of the ports for American and Irish provisions of every kind, may still by the interposition of the legislature, and that power alone, produce them timely relief.

This at least is the sincere wish of one who was formerly a little farmer, but  
now a

STARVING LABOURER.

## APPENDIX No. 40.

## UNITED STATES.

## THE PROBLEM OF THE ECONOMIC DISTRIBUTION OF AGRICULTURAL PRODUCTS: RESOLUTIONS OF CONGRESS.

*Monthly Bulletin of Economic and Social Intelligence, October, 1914.*

In this Bulletin we have more than once had occasion to refer to the fact that among American farmers there is widespread and growing dissatisfaction with existing methods of distributing farm products. Briefly, the farmers complain that the fraction which they receive of the ultimate price paid by the consumer is unfairly small, and that as a result farming is yielding either a very small margin of profit or no profit at all.

With the object of ascertaining the facts by an investigation of the whole process of distribution, the Government, in 1913 established a special office under the title of the Bureau of Marketing, and at the same time with the object of supplementing the work of the new Bureau and, specifically, for the purpose of promoting sound schemes of co-operation among both producers and consumers, organized, under the direction of the eminent economist, Professor T. N. Carver, a small special division known as the Rural Organization Service. These new divisions have been steadily at work for some twelve months, but as the questions with which they are occupied are notoriously complicated and the inquiries have to be conducted over an immensely wide field, it is too early yet to expect them to produce tangible results.

In the meantime, however, the discussion of the problem of finding more economic methods for the sale and distribution of farm products continues unabated in the United States, and on two occasions at least, has occupied the attention of Congress. On September 8 of this year Mr. Fletcher introduced in the Senate a "Joint Resolution for the Appointment of a National Marketing Commission," and two days later Mr. Goodwin introduced the same resolution in a slightly amended form in the House of Representatives. As amended the resolution reads thus:—

"Whereas it is patent that there are defects in the economic system of the United States which affect adversely the producers and the consumers of agricultural products; and

"Whereas these defects have been accentuated by the European war, and to a degree justifying the recent utterances of the president of the United States in the matter of the high cost of living; and

"Whereas various attempts have been made from time to time to overcome these defects, mainly through non-governmental agencies, and recently under governmental agency under the Bureau of Marketing of the Department of Agriculture; and

"Whereas experience has, however, proven that the solution of this question is not to be found in non-governmental agencies nor is it to be found in a governmental agency. It is to be found in a semi-official governmental agency, as is here proposed, as witness the success in the European countries of such a system, a system which has swept aside the trusts in food products and which renders the trust an impossibility; and

"Whereas the present abnormally high prices for food products not alone offers an opportune time for the establishment of a semi-official governmental agency as



a means for the temporary solution of this problem, but also for the organization of the agricultural forces of the United States on the lines indicated as a means for the permanent solution of this problem: Now, therefore, be it

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled, That the President be authorized and requested to appoint a National Marketing Commission to be composed of 29 members, 15 of whom shall be farmers and 14 of whom shall be selected with reference to their eminence in commerce, law, finance and transportation.

Sec. 2. That such National Marketing Commission shall meet in the city of Washington at a time designated by the President and organize by the election of officers, and adopt a plan of action for the effective organization of the States, counties, and localities of the United States for the economic distribution of the products of the farm, with power to act in so far as affecting individuals and organizations that shall elect to become a part of this national marketing system."

It will be seen that the resolution as it stands gives very little information as to what powers it is proposed to confer on the National Commission or as to what its precise duties would be. The resolution was under consideration by the House of Representatives Committee on Agriculture on September 14, and on that occasion Mr. David Lubin, the United States delegate to the International Institute of Agriculture, who may be regarded as the real author of the scheme, explained his views at some length.

From Mr. Lubin's evidence it appears that what is contemplated is the creation of a huge number of commissions which, under the final direction of the National Marketing Commission, will form a single vast organization, not, indeed, for the actual work of selling and distributing farm produce, but for the dissemination of information as to markets and for the provision of all the other facilities necessary for the economic distribution of such produce.

The National Commission would be appointed in the first instance by the President. The governors of the States would then appoint State commissions; the State commissions would appoint county commissions; and, lastly, the county commissions would appoint township commissions. The county and township commissions would make provision for sending the local products to market in the right quantities and at the right time, and would, where necessary, establish open air and covered markets, sample rooms, exchanges and auction rooms, providing separate divisions in the various salesrooms for wholesale and for retail selling. The National Commission in Washington would resemble the German Landwirtschaftsrat inasmuch as it would act as an Advisory Council of the Government in all matters affecting agriculture and particularly in all that related to agricultural legislation, but as its most important function would be to direct the business of selling and distributing farm products, it would resemble even more closely the board of directors of a co-operative selling association or "exchange." The majority of the members of all the commissions would be farmers, while the minority, it is intended, would be composed largely of business men of high ability thoroughly familiar with modern methods of distribution and sale.

Under the expert direction of the commissions the distribution of farm products would, it is claimed, be affected with maximum regularity at a minimum cost, and as a result the producer receive better prices and at the same time be relieved from the risk and anxiety of selling through agencies over which he has no control; while the consumer would benefit by having assured to him constant supplies of fresh products at fair and reasonable prices.

On September 4, 1914, the Senate passed another joint resolution which may in the course of a comparatively short time prove to be of immense importance, and which if acted upon will introduce an entirely new factor into the problem of distributing the world's supply of agricultural staples. The resolution in question aims at securing, through the medium of the international Institute of Agriculture, the con-



vening of an International Conference at Rome for the consideration of the problem of "steadying the world's prices for staples." The resolution as passed by both Houses of Congress is as follows:—

"Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,

That in accordance with the authority of letter (f) of article nine of the treaty establishing the Institute, which provides that it shall "submit to the approval of the Governments, if there be need, measures for the protection of the common interests of farmers," the American Delegate to the International Institute of Agriculture is hereby instructed to present (during the nineteen hundred and fourteen fall sessions) to the Permanent Committee the following Resolutions, to the end that they may be submitted for action at the General Assembly in nineteen hundred and fifteen, so as to permit the proposed Conference to be held in Rome during the fortnight preceding the session of the General Assembly of the Institute in nineteen hundred and seventeen:

#### RESOLUTIONS.

"The General Assembly instructs the International Institute of Agriculture to invite the adhering governments to participate in an International Conference on the subject of steadying the world's price of staples.

"This conference shall consist of members appointed by each of the Governments adhering to the Institute, and is to consider the advisability of formulating a Convention for the establishment of a Permanent International Commerce Commission on Merchant Marine and on Ocean Freight Rates with consultative, deliberative, and advisory powers.

"Said Conference to be held in Rome during the fortnight preceding the session of the General Assembly of the Institute in nineteen hundred and seventeen."

It will be observed the steps by which it is proposed to achieve the object in view,—the establishment of a Permanent Commission on Ocean Freight Rates,—are of a very deliberate kind, and that even under the most favourable circumstances no formal proposal for an International Convention for the purpose could be made before 1917. Ample time, it is evident, is allowed for the fullest possible discussion of the whole question, apart from the fact that it would be unreasonably sanguine to hope that a great war will not impose at least some delay upon the materialization of the project.

## APPENDIX No. 41.

REPORT OF THE LAND SETTLEMENT COMMITTEE OF THE  
VANCOUVER BOARD OF TRADE.

December 5, 1912.

To the President and Members of the Vancouver Board of Trade.

Your committee beg to report as follows:—

We have, with the sanction of the Provincial Government, had the benefit of interviews with the following authorities on this question:—

Mr. R. A. Renwick, Deputy Minister of Lands;

Mr. W. E. Scott, Deputy Minister of Agriculture;

also

Mr. S. Maber, Department of Interior, Ottawa;

Mr. E. W. Beckett, Crown Timber Agent, New Westminster;

Mr. A. Lucas, M.L.A., and others.

We find that while large tracts of provincial lands, particularly during the last few years, have been and are being surveyed as rapidly as possible, there still remains a vast portion of the province unknown and unreported as to its agricultural and other possibilities.

THAT large blocks of good land have been discovered and secured by private persons, to the detriment of settlement by pre-emption, and that in the path of railways building or likely to be built, lands are being and will likely be secured for speculative purposes to the further detriment of a land settlement policy.

THAT the benefit that ought to result from the present railway policy is likely to be considerably curtailed from these causes.

THAT while several known fertile valleys and other large portions of the province have been wisely reserved for pre-emption,

AND while the new land office in Vancouver, which is a step in the right direction, has been the means of placing some settlers near the coast waterways, by which a means of marketing produce is, or could be, made available,

YET it is still difficult for the Government's agents to locate any large number of farmers or settlers on lands, for pre-emption or otherwise, under conditions having facilities for marketing produce that would enable such settlers to hope to make a living by the farming industry.

This state of affairs, arising from the difficulties of geographical and natural causes, when taken into consideration with the fact that about 20 million in cash, a large portion of which could be produced in British Columbia, is leaving the province annually for farm products, warrants, in our opinion, an active and liberal policy of assistance to settlement, to overcome these natural obstacles, particularly those of clearing and transportation, which difficulties are so peculiar to British Columbia.

It is easily seen that the very condition of mountain, forest and stream, which makes our province so abundantly rich in timber, minerals and fish, and from which such a large revenue is derived, are conditions averse to agriculture, and are therefore good and sufficient reasons for warranting a liberal Government outlay, such as might not be considered wise under other conditions.

Your committee therefore beg to recommend as follows:—

*Outline.*—That conditions demand immediate legislation to prevent the acquiring, holding or speculation in agricultural lands. They demand also the continued active building of trunk highways, and liberal Government assistance to settlers, such as the clearing of land and the providing of marketing facilities.

*Clause 1.*—THAT except under binding settlement and improvement conditions, all agricultural lands be reserved for the actual settler.

*Clause 2.*—THAT systematic surveying be continued with all speed possible. That in future, pre-emptions, if necessary, vary in size and shape, to more equally distribute the advantages of access to rivers or highways and to suit surrounding conditions of lands, and that longer and narrower pre-emptions be surveyed, being more suitable to district settlement.

*Clause 3.*—THAT pre-emptions be reduced in size to 40 acres or more, where soil and locality are found suitable for such reductions.

*Clause 4.*—THAT land held suitable for agriculture as timber lands, or portions thereof, containing less than 5,000 feet per acre west of the Cascades, and 3,000 feet east of the Cascades, be cancelled and held by the Government, if possible, for pre-emption.

*Clause 5.*—THAT lands pre-empted, where the conditions of pre-emption have not been carried out, unless just and reasonable cause be shown, be promptly claimed and revert to the Crown.

*Clause 6.*—THAT the present policy of trunk road building be energetically carried on, particularly to relieve localities where farming has long existed without reasonably economic means of marketing produce.

*Clause 7.*—THAT a Highways Act be placed on the Statute Book to act generally and automatically, so as to provide prompt Government assistance in building main roads.

*Clause 8.*—THE purchase of modern road-making machinery is commended and we also advise the prompt reserving or securing for district and municipal purposes, of known accessible deposits of road-making materials, such as rock, gravel and sand.

*Clause 9.*—THAT assistance in clearing, irrigating or draining, be given to established farmers either by direct loan or by Government guaranteed district bonds, so as to quickly extend acreage for cultivation.

*Clause 10.*—THAT a policy of practical assistance to settlers be inaugurated, such as establishing district settlements in various parts of the province, selected with the view of most easily building and maintaining regular communication with a market, and providing the means to such settlements at minimum cost of part cleaning, draining, irrigating or otherwise assisting the starting of farming operations, as circumstances may require, such outlays chargeable against the land until repaid.

*Clause 11.*—THAT a department of "land settlement" be organized, having funds at its disposal to efficiently carry out this policy.

*Clause 12.*—WHERE logged or partly cleared lands held under timber licenses are suitable for agriculture, that the Government endeavour to secure them for that purpose.

*Clause 13.*—THAT the Government give liberal assistance to the establishment of fishing settlements by British subjects.

*Clause 14.*—FINDING that coast settlement has been hindered for want of good wharves, which are absolutely necessary for the marketing of produce, we urge the Provincial Government to use its good offices with the Dominion Government in promptly supplying such facilities to settlers.

THE committee note with regret the enormous tracts of the most desirably situated agricultural lands, as Indian reserves, are neither being developed nor made use of, greatly to the detriment of agriculture in this province.

AND ALSO that the appointment of a Royal Commission on agriculture is likely to further delay an urgently needed land settlement policy and trust that, at least, the most urgent of these recommendations may be dealt with by the Government this coming session.

YOUR committee suggest that the president of the board and the chairman of the Land Settlement Committee appoint a delegation of seven or more to press the claims given expression to in the above report on the Government at the earliest possible date.

H. A. STONE, *Convener*.  
W. A. BLAIR, *Secretary*.

## LAND SETTLEMENT.

*Speech delivered by Mr. H. A. Stone, Convener of the Land Settlement Committee of the Board of Trade, at the regular meeting of that body, held in the Board of Trade Rooms, Molson's Bank Building, December 10, 1912.*

The subject of Land Settlement is undoubtedly the most difficult and urgent question confronting British Columbia to-day; casting its shadow on the prosperity that this province has enjoyed the last ten years, it still remains an unsolved problem.

It is of serious import because the natural obstacles to overcome, either by the Government or individual, are generally so great as to dishearten either. It has become evident that without Government assistance any hope of reasonably quickly extending the general farming industry is doomed to disappointment, and unless it is extended the fifteen millions of cash now leaving the province annually for farm products will soon increase to such an alarming drain upon our capital as to be of grave concern to the mercantile and industrial interests; in considering the future we ought not to forget that the present financial prosperity is due in part to causes that cannot remain with us always. These are good reasons for the interest this board has shown in the past, and should take on this subject.

Ladysmith to-day is an instance and example such as from time to time confronts us of how quickly business interests crumble to pieces if one natural resource fails when unsupported by the more staple farming industry.

During the past ten years manufacturing has increased from very little to forty-five millions per annum and the provincial revenue has made great gains. The revenue from lands has, in the same period, grown from \$131,000 to three millions; from timber and mines, from \$465,000 to two and three-quarter millions, and from all sources from one and three-quarter millions to ten and one-half millions. While this great progress has been going forward, how deplorably slight has been the increase of lands under cultivation.

During the last year or two how many thousands of acres have been converted into 25 foot lots, and what an alarming proportion of those who should be prosperous and energetic farmers to-day are neglecting the axe and the plough, and are seeking an opportunity to sell their lands to the best advantage. One cannot shut one's eyes to this fact. Evidence and observation show this lack of farming energy. It is found in the Fraser valley, where, on the north side, certainly farms have dwindled to half their former number, and even at Langley, the so-called garden of British Columbia. It is the same in the Squamish valley or the older settlements of the Cariboo, Chilcotin and other parts. The disheartened farmer, after long struggling with his endless stumps or want of transportation, is looking and hoping either for some assistance to overcome his difficulties or to dispose of his holdings.

There are, of course, exceptions to this dismal outlook for agriculture, such as the deep rich lands at the delta of the Fraser river, which yield so abundantly of hay and oats, and the beautiful fruit lands of the Okanagan and other valleys. As



regards the latter development, irrigation and the preparation of farms by private enterprise on a large scale has played an important part, and this fact will no doubt have due consideration with the Government when considering Government assistance to settlers such as your committee recommends. It would seem reasonable, however, that a Government should be able to clear or otherwise prepare ground for settlement at a lower cost than any private company. Land so improved would not increase in value except by the actual cost of such improvements, and it is surely only right and in the interests of the province, and indeed our sympathy leans towards the settlers securing improved lands at cost and nothing more.

I dwell on this point because I believe it is the important consideration bearing on the establishment of the principle of Government assistance to settlers, and I would further say that notwithstanding that successful farming in fruit lands is partly due to the private enterprise referred to, it is obvious that if development is to be left to private companies to clear and prepare the land for settlement, it will always remain a deplorable fact, as is the case to-day, that it is only the settler with a substantial bank account—and they do not grow on every tree—that can hope to farm with any assurance of success, or that can be invited to come and settle in British Columbia. The mercantile interests should be alarmed by the continuation of such a prospect, or by any further delay of a feasible assisted land settlement policy. Past experience shows that the work of clearing and irrigating in British Columbia is generally too stupendous for the independent farmer, and that without both good roads and transportation facilities his efforts give little hope of a living return.

We must not for a moment forget the good work the Government has done and is doing by their road-building and railway policies, or that of the Department of Agriculture in its excellent work of educating those engaged in agriculture and in providing capital to assist dairying and generally to increase and protect the efficiency of the fruit and other cultivation, which assistance has no doubt greatly helped to increase production on the lands that are occupied.

Now, as to the total of farm produce now marketed, and the amount it is necessary for us to purchase from sources outside the province, the last figures given us are those of the Hon. Price Ellison in his budget speech for 1911, a minister whom the province is fortunate in having as one who is in personal sympathy with agriculture and generally speaking, favourable to Government assistance to farming.

The total production was 20 $\frac{3}{4}$  millions and the imports 14 $\frac{3}{4}$  millions; if we compare these figures we find in round numbers that of

Cheese, butter and milk we produce 4 millions and import 2 millions.							
Hay . . . . .	"	"	5	"	"	3	"
Grain . . . . .	"	"	2 $\frac{1}{2}$	"	"	2	"
Vegetables . . . . .	"	"	4	"	"	no record.	
Live stock . . . . .	"	"	3	"	"	3	millions.
Poultry . . . . .	"	"	3	"	"	1 $\frac{1}{8}$	"
Eggs . . . . .	"	"	1 $\frac{1}{2}$	"	"	1 $\frac{1}{2}$	"
Meats . . . . .	"	"	4	"	"	1 $\frac{1}{2}$	"
Fruit . . . . .	"	"	1 $\frac{1}{2}$	"	"	1 $\frac{1}{2}$	"

So, of the following five staple farm products—fruit, cheese, poultry, eggs and meats—our production is only 2 $\frac{5}{8}$  millions of a consumption of over 7 millions. This surely is not a creditable showing after 20 years of farming in British Columbia. The only item we appear to produce a sufficiency of is vegetables, which production is considerably due to the industrious Oriental.

Flour—the most staple of all necessities—is almost all imported, and if included in these figures would greatly increase them to our disadvantage. Aside from this shortage of production and an important reason for the encouragement of farming, is the necessity of having a sound and firm industrial foundation for the building up of our fluctuating natural industries.



The large importations of farm products carries to the settler an assurance of a good home market, and is an additional reason for the Government to encourage settlement and to assist in the development of partly cleared or partly drained existing farms.

We are still inviting settlers through Government agencies and bulletins to partake of and enjoy the richness of our lands, climate and beautiful surroundings without lending any helping hand towards their settling down on arrival. The policy outlined by your committee should change this to a practised welcome and to a steady increase of the right kind of settler. Objections to our recommendations may possibly come from those who are profiting and expect to profit by land speculation under the conditions that exist, but I venture to say that a policy giving benefit to the greatest number and to the province as a whole will receive the approval and hearty support of this Board of Trade. We do not wish to underestimate the great problems to be overcome by the adoption of the policy suggested.

We are aware that for the first 100 miles of the new Government-assisted railway, running north from Newport, there is hardly an acre left for pre-emption. We know that the majority of lands held for pre-emption are without bridges or roads, or means of marketing produce. We know that it will require liberal outlays to make these lands ready for settlement. We know that in such vast territories hemmed in by mountain range, and swift-running and great water-courses, that development must be slow, and we know from the experience of the Cariboo and other parts that farming cannot succeed without good transportation as well as good roads; but we do say that conditions warrant and urgently call for the opening up and preparing for the farmer of a few spots of those lands, to which settlers in numbers could be directed and provided with roads and transportation facilities to reach a market.

Such a policy as we submit would tend to moderate the upward tendency in the price of food products; would in more ways than one encourage manufacturing; would retain for re-investment in our own province part of the fifteen million dollars which we lose annually, and would strengthen our economic financial position.

A Government outlay to these ends would surely be as wise and as advantageous an outlay as the funds of the province could possibly be put to.

That this problem is a difficult one should not deter a progressive people. It is true no champion has yet come forward to squarely and energetically face this question. No Saint George has yet buckled on his armour to meet this dragon obstructing the progress of this province, but fortunately we now have a newly-made knight in the person of Sir Richard, and we trust the time has arrived when our knight will take up the lance in earnest and win the victory by making the questions of "Government Assistance to Settlers" and "Government Assistance to Farmers" the question of the hour and one of paramount importance in provincial legislation.

## APPENDIX No. 42.

## HIGH COST OF LIVING.

*Address from the Single Tax Association to the Commission Appointed by the Dominion Government, 1914.*

Gentlemen:

As we did not have the opportunity to meet you when you visited this city, we take this method of calling your attention to some of the most important factors in this inquiry.

Simply to collect a number of figures respecting the price of certain commodities, is of no value, serves no purpose, unless we know the meaning and relation of these figures to one another. Hitherto all the numbers compiled and published respecting the high cost of living, have related to the value of certain labour products—the products of the farm or the factory; and it is a fact of a most extraordinary character that the figures which are the most important for this inquiry, have been, so far as we have observed, wholly omitted. We refer to the value of the land, and to the taxes and their method of imposition.

It is quite true that during the last ten or twelve years the price of butter has advanced from 20 cents to 25 cents; eggs from 20 cents to 33 cents; hogs from \$5 or \$6 to nearly \$10; sheep the same, and cattle from \$4.50 to \$8.50; it does not follow that the farmers are receiving any too much of the wealth of the country.

In order to solve this problem, it is necessary to distinguish the agencies that promote prosperity, from the unfortunate agencies which destroy prosperity. While millions of people go to the land that they may put it to its best use, that they may produce the greatest abundance at the lowest possible price, at the same time many others hold the land, not to add to the welfare of their fellows, but that they may acquire fortune by the impoverishment of the industrious producers.

Between the beneficence of the producers, coming to our markets with the abundance of their products, and the empty-handedness of the speculators, demanding often an enormous share of that product, to which they have contributed nothing, there could not be a greater contrast. Wherever there is a likelihood of an accession of population, there the speculators turn the land into a desert, that they may acquire the result of other people's labour, because public improvements and the growth of the multitude will give increased value to that land.

Suppose the whole population pursued the methods of the speculators, where would be the prosperity of the country? would it not be starvation and death?

While industry and ingenuity are doing their utmost to enrich, speculation is doing its utmost to impoverish. While one is striving to make life easier for everyone, the other is striving to make life more bitter and hard.

The land of the city of Toronto, which the government presented to a few families as a free gift a little more than a century ago, has advanced in value with every increase of population, till now the assessment of the land stands at about \$261,000,000, while the value of the buildings is placed at a little over \$181,000,000.

Hitherto these two values have been treated as though they represented equally an increase of wealth. While the increased value of the buildings indicates a greater abundance of buildings and consequently a greater abundance of wealth, the increase in the value of the land is an indication of the greater demand of the people for land. It comes from the pressure of population and public improvements. The value of the

buildings is an asset, while the value of the land is a liability. While labour has added buildings to the value of \$181,000,000, the increased value of the land, according to our present methods of taxation, allow the owners of the land to make a claim on those buildings and other assets, to the amount of \$261,000,000.

When the adjustment of taxation allows the owners of the land to collect the value which comes to the land through the presence of population, then it is of the utmost importance to observe that these landowners can appropriate the buildings, crops and other labour products, which they do nothing to produce. Thus they are exempt from all toil to provide anything for themselves or for the support of the Government.

This subjects one part of society to a double liability; one to support the government, the other to support the landowners. This leaves one part of society to do all the work and the other part to carry off the wealth. One part enriches, the other part impoverishes.

The following figures will give some idea of the claim of the landowners on the rest of the community as shown by the assessment of the land and the buildings:—

Winnipeg, Man., land ..	\$151,795,740	Buildings..	\$93,997,150
Moosejaw, Sask. " ..	41,451,189	" ..	18,298,870
Regina, Sask. " ..	63,558,346	" ..	13,516,720
Calgary, Alta. " ..	102,260,915	" ..	20,813,620

In the towns and cities of the eastern part of the Dominion is no such excess of the value of the land over that of the buildings.

If the owners of the land in Winnipeg have a claim on the community of nearly \$152,000,000, and there are only \$93,000,000 worth of buildings, the land owners can appropriate all the buildings and also \$60,000,000 of other assets.

In ordinary years the liability to the owners of the land is always so great that a large part of the business is necessarily conducted on small margins. If, however, a frenzy of speculation strikes any locality, then prices are carried beyond all reason, often beyond the possibility of realization. In that case a collapse is inevitable.

The land which God gave to humanity as a free gift becomes the dearest thing for which they have to pay. When John Stuart Mill was asked what is the heaviest burden on the land, he replied, "The landlord."

In the city of Toronto, since the year 1904, the value of the land has increased from about \$61,000,000 to \$261,000,000, or more than four-fold, while the value of the buildings has arisen from \$61,000,000 to \$181,000,000, just about three-fold, and at the same time the population increased from 219,000 to 445,000, or a little more than double.

Thus the value of the land has increased fully twice as fast as the population, and one-third faster than the value of the buildings.

In this way the liability of industry increased faster than the population, and also faster than the products of industry. The history of the last hundred years has shown invariably that when this combination of conditions occurs, it is followed invariably by depression.

The wholesale bankruptcies of the year 1837 accompanied with the closing of a large number of the banks, was preceded by a wildcat inflation of land values by the speculators. A similar collapse of the year 1857, with the paralysis of its industries and the closure of all the banks of the principal cities was preceded by a frenzy of land speculation. Similar conditions prevailed previous to the depression of 1893.

During the last few years we have witnessed the phenomenal growth of cities, and at the same time the swarming of the speculators, many of whom without adding a dollar to the wealth of the community, have won ample fortunes.

While thus labour has been grinding at the wheel, and after being despoiled by unjust taxation, competing with the advent of shoals of immigrants, squeezed like a rag by speculators, and stripped of his right to his share in this earth, thus is he reduced to hardship and often to want.

The owner of an acre of land well situated in this city can easily obtain a ground rental of \$10,000 to \$100,000 yearly for which he need not do one hour's work in a lifetime. The cost of living to him is nothing. The returns published by the Government show that the average wage is lower than \$500 yearly. To the workman the cost of living is the most of his life.

So long as the value of the buildings, the incomes, and the businesses are assessed for taxation there will always be a margin of land value left, which will lead the speculator and the ground lord to despoil industry, so that the mass of the people will have to exercise much care, economy and ingenuity to make the income cover the expense.

The simple remedy and the only one which we can see will be in any way effective, is to remove the taxes as quickly as possible from the products of industry and place them on the value of land.

Yours respectfully,

(Sgd.) D. B. JACQUES,

*President.*

(Sgd.) SYDENHAM THOMPSON,

*Secretary.*

#### NEARING THE CAUSE.

OTTAWA CITIZEN, December 11, 1913.

(NOTE.—The article herewith reproduced is particularly but by no means solely applicable to conditions in Western Canada, and is therefore recommended to the present commission on the high cost of living, by a Westerner.)

"Every conceivable cause for the high cost of living has apparently been mentioned, ranging from the penalty of prosperity to the amount of gold in a dollar.

"It is interesting to note that the growing tendency is to look for the real cause in the land. Evidently more, and more people are getting down to fundamental principles, with good promise that the real cause will be discovered and removed.

"In a food producing country like Canada the secret of salvation from the high cost of living must surely be found at home, and not abroad.

"Hon. George E. Foster in his speech at Smith's Falls showed unmistakable signs of having recognized this latter fact.

"He referred to the effect made upon the cost of living by land speculation.

"He showed that the operations of the land speculators had raised rent in such a way as to greatly increase the cost of distribution, without adding to the price paid the producer. 'They run up real estate to ten times its value, and not a mother's son of them adds one cent to the value of the land.'

"Here was a perfectly clear statement concerning *unearned increment*, and the folly of allowing it to be possessed by private speculators instead of by the community whose activity created it.

"If he had continued his argument to its logical and practical conclusion he would have shown that in city and country this process has been going on, until the country is caught in the grip of land monopoly."

All of the unthinking are moreover reaching out after this will-o'-the-wisp represented by fictitious land values, and must reap the consequence.

"The trail of the cause of the high cost of living ends here."

So says the Hon. George Foster

So says the *Ottawa Citizen*.



Read also *Saturday Night*, September 20th and 27th, and October 25th, *Citizen* December 4th and December 27th. *Montreal Weekly Witness*, November 4th. *St. John Telegraph*, *Financial Times* and *Edmonton Capital*, on the unearned increment.

REMEDY: Tax the unearned increment of land sales thirty per cent.

To the HONOURABLE WALTER SCOTT,  
Premier of the Province of Saskatchewan.

The Petition of the undersigned residents of the Province of Saskatchewan and adjacent provinces without regard to political party humbly sheweth.

1. That individual ownership of land exists by the sufferance of the State.
2. That the progressive increase in the market value of farm and town land, while as yet unimproved, is correctly attributed to the labours of the people as a whole; that is to say, it is a phenomenon of general and not individual development.
3. Such increases in land values are by the sufferance of the State permitted to accrue to individuals, who administer the said profits for themselves.
4. That a fictitious increase out of proportion to the normal increase in land values is commonly brought about by a class of citizens who are otherwise engaged in no productive work.
5. That a limitation of these activities is desirable.
6. That the general cost of living is increased in proportion to the number of those people and their families who are so engaged in unproductive labour and moreover a labour which has no ethical value but the reverse; while they subsist on community wealth.

We, your petitioners, believe that the day of such unregulated private tenure of land has seen its period of fullest usefulness and that it is now waning; that the speculation in land for rise in value will be productive of greater evils in the future than in the past if unchecked; and that the public interest demands legislation for an expropriation of the future unearned increment of land, both farm and town properties being included.

It is therefore proposed by an initial tax of thirty (30) per cent on the said future increments as fixed by the sworn records of actual sales, and by a first charge on agreements of sale, to discourage the speculation in land for a rise in value but initially most particularly to discourage the creation of fictitious values and to steady investments.

And whereas the enactment of such legislation would rob no man of what he has by his labour and skill actually produced;

And whereas the enactment of such legislation would restore to the public a portion of that which they as a whole produce, to be used for the legitimate objects of public works and social betterments; without disturbing for the time being the actual tenure of land for productive or for residential purposes or for no purpose in the option of the holder of the said land;

And whereas the proposed legislation is remedial;

And whereas it will materially decrease the cost of living and promote industry;

And whereas it is in line with those great modern movements which recognize the indications of social readjustment and seeks means by which the threatening wave may be made to spend its force without destruction, restoring to the public that which the present system of tenure has alienated from them, namely community wealth;

And whereas the proposed legislation is moderate;

Therefore we do petition your Government to take such steps in conjunction with the Government of Canada as shall render all lands in the Province of Saskatchewan amenable to the said taxation of thirty per cent on unearned profits over and above improvement values individually created; such profits being determined by sworn records of actual sales and the opinion of legally constituted boards of assessors; and further for the placing of a first charge on all agreements of sale of not less than ten



(10) per cent of the calculated unearned profits accruing; the balance or twenty per cent to be recoverable in its entirety from the seller on the completion of deed.

And that only such part of the said levies as your government may deem advisable become a part of the public fund of the municipalities and towns affected thereby; the balance to become the property of the Province of Saskatchewan for revenue or investment and the needed public betterments.

And if the constitutionality of such legislation be in doubt, may the same be referred by the respective Governments to the Government of Canada or the Parliament of Great Britain, for the needed amendments to the law to the end that the local machinery of governments be made effective for such appraisals and levies.

Also that your Government will, as soon as practicable, make necessary the said appraisements and levies by Statute.

"Land never was private property in that personal sense in which we speak of a thing as our own, with which we may do as we please. It belongs to all the human race."

Respectfully submitted,

NOTE.—The above form of Petition was handed to the Board of Inquiry at Regina.

## APPENDIX No. 43.

THE ECONOMICAL CONDITION AND RESOURCES OF THE  
CANADIAN MIDDLE WEST.

## I.

## INTRODUCTORY.

A study of the causes of the high prices prevailing here should begin by taking account of the increase of intelligence in the past century among people everywhere, with an accompanying advance in enterprise. Education and wider reading have awakened fuller consciousness in them; they are more aware of what is going on in the world, and with this knowledge their physical and mental wants increase.

The spirit of "divine discontent" is abroad, spurring men to rise in their standard of living and so promoting civilization; none are content without better fare than their fathers could get. They strive for more money as a means to attain more luxury, more amusement, more leisure to enjoy. The love of life has increased with their wider outlook; and the capacity to enjoy is active and eager to be gratified, at first in physical well-being and after in the exercise of the higher faculties of taste and imagination.

These larger wants have occasioned a continually growing increase in manufactures and trade, which has been made feasible by a concurrently increasing output of gold. Not that the supply of gold in itself directly promotes trade, but that on the quantity of it in circulation and in reserve depends the volume of credit money—of bank notes, loans and credits—available for trade, always in due ratio though to a vastly greater amount than the gold. The possession of this by the banks enables credit and credit money to be issued to a proportionate though much larger volume, and so promotes or retards trade as the quantity of gold available expands or shrinks. If credit money be in excess, trade is over-stimulated, while any diminution of its volume through a loss of its basis of gold, brings it down to a sober use, though, if the diminution be not very great, trade will still, as an after-effect of the expansion, be stimulated in some measure. The credit money now actually in use might have been still larger in volume but for the continual hoarding in India of a good deal of the world's gold supply, which withdrawing has had the effect of keeping the rest effective in extending and cheapening credit. It is to be noted, however, in this connection that any very large increase in the supply of gold could not stimulate trade to a correspondingly large amount unless it were gradual, spread over years, for the volume of trade depends first of all on the capacity to do it, and this capacity is not as elastic as the production of gold might conceivably become. Therefore we may say that the price of commodities, depending on the state of trade and credit would not automatically rise, as is sometimes thought, correspondingly with an overabundant supply of gold.

This expansion on all sides went on until at last it seemed a few months ago that the very limit of the business capacity of the western world had been reached. New enterprises were every day begun, and the production of goods was so increased that inevitably this must have equalled or even exceeded the consumption had it not been (1) for the great stimulus to consumption mentioned above, and (2) for a continual loss of goods through waste in various ways—in a huge destruction by fire always going on, by shipwreck, in unskilful or careless housekeeping, in an extravagant use

of necessities and luxuries, in the support of a large non-producing town population, not being distributors; and (but this is only abroad) in the maintenance of vast armies and of non-producing workmen on strike—all which and the like has used up the increase in goods produced and prevented the fall in prices that should otherwise have taken place, if in these various ways consumption had not been made to exceed production.

A marked slackening of business set in last mid-winter; there came a pause, then a receding of the tide; and it looked for a time as if more and more slackness in the trade of the whole western world were coming. That most timorous and apprehensive thing—credit, over-strained no doubt, taking alarm was shaken when business showed signs of proving unprofitable; and available working capital at once grew scarce and dear.

Such a stoppage of industrial loans—of industrial working capital would ordinarily by checking production tend to raise or maintain prices. For these are governed by the law of supply and demand, and when there is a scarcity of goods—when demand exceeds supply, prices rule high and tend to rise; and when to ordinary consumption is added such waste as has been spoken of, a scarcity still greater is produced, and prices rise still higher to the consumer. This when trade is good. But when it is bad, consumption falls off as well as production, and hence a check is put to any rise of prices, which indeed may actually fall, from a pressure to sell goods.

## II.

The working capital proper of a nation consists in its accumulated savings, but our capital in Western Canada still lies in undeveloped, or but partially developed resources. Individuals among us have local capital but the West as a whole has not yet accumulated a realized working capital of its own; it owes more debt payable in gold abroad than it has gold to pay with. But it has had in general credit to supplement what gold it owns—credit as a vigorous growing nation, an enterprising and industrious people, with a reputable government, possessing vast latent resources—credit abroad, chiefly as is natural, with the mother country. To the confidence of England and her generous financial aid we owe all our industrial expansion, development, and prosperity the past ten years.

Through her world-wide trading the savings of England increase her surplus capital so fast that she employs the excess as it grows in loans and ventures the world over; but an over-demand on this surplus from everywhere for trade purposes and loan requirements had come and as an incident used up the portion of it that would otherwise have been available to Western Canada; though perhaps this had been already forestalled by our too lavish demands for development purposes, while our credit had been impaired by some ill effects of the inordinate speculation prevailing. At that juncture, however, in England what with vast foreign war and colonial government and railway loans and trade commitments, there was not sufficient surplus savings available to supply all demands on it from every quarter. Despite the continuous strain, however, of these demands they were gradually met except for Canada; through it all general credit remained unimpaired and no sign of panic was seen;—all showing an inherent strength that affords us a hope for the future, when we shall have rehabilitated ourselves. The depression there has since passed off and trade now seems as flourishing as ever, owing in part to an accumulation of available funds through the depression. But the credit of Western Canada has not yet revived; our borrowing power is for the moment at a low ebb. We have no doubt been unconscionably lavish in spending the money lent us. Too much has been spent on our towns and cities; the development of our resources has been hastened too much; railway construction in the far West has been too rapid for our ready means.

Besides bond capital for railway construction, we have borrowed abroad largely for provincial public works—roads, bridges, and buildings, and for municipal pur-

poses—schools, street construction and lighting, water works, drainage and civic buildings; all this latter on a scale to accommodate town populations far too large. From these borrowings, with the proceeds of our exports, has come our working capital, supplemented by money sent here from abroad for investment or brought into the country by immigrants, and by commercial and bank credits. On borrowed moneys interest must of course be paid all along, while in general payment of the principal, lent for the development of the country, is properly set over until some fruits of the development shall fall in.

But our supply of borrowed money for these purposes failing, the result immediately followed that many important municipal works in the larger cities and towns came to a stop, private building also stopping in great part, except for large institutions that could afford to build for the future; and other industries slackened, the demand for goods falling off; with the consequence everywhere that many workpeople and clerks, with troops of temporary real estate dealers, were thrown out of employment. Artisans and other workmen expect work to slacken in the winter season; but the past winter there was more unemployment than usual, owing to the many immigrants that had been allured here before it was seen how our supply of money from abroad would stop and what ill-effects would ensue; and the extra competition of these for what little work has been doing has aggravated the situation for the rest.

The stoppage of supply caught everybody under some commitments for spending. Public works then in progress had to be finished; private people had investments in land or buildings only partly paid for that could not be sold, or in businesses whose stocks were full and almost as unsaleable. With everybody money became (as it still is) scarce; and this through rank after rank from the well-off downward to the smallest trader.

A healthier state now happily prevails. People have settled down to the everyday business at hand, of which there is usually plenty to be found in a new country with an industrious population such as ours. Debts are being paid, slowly it is true, and the banks are able safely to do much for legitimate business purposes—all that it is wise to do in view of the precarious state of the Canada account in London. Still there is much unemployment.

A much larger supply of money is wanted; but while money accumulates in England from savings and is invested as occasion serves, we cannot expect that it will flow readily into our West yet awhile. This Western Canada is a new country and the populations have not the settled habits of the older provinces. The men are mostly young and among them are many whom it is hard to keep at steady employment, with such limitless opportunities as they fancy on all sides. The past ten years has been for us a period of settlement and rapid growth amid vast undeveloped resources, where speculation might have been expected; and this indeed has hovered about all our trading proper, ready to break in at the least opportunity. The exhilarating climate too fosters a daring sanguine spirit, which, though it be seen only here and there, yet, being most prominent in the public eye, causes a doubt of the general stability of our business men, however little they may be implicated; and so is a constant menace to our credit.

While therefore if we are open to any suspicion on this head as well as on that of extravagance such of our industrial securities as are not conspicuously good are unlikely to be in favour in London, we may yet obtain there a share of their surplus funds for certain municipal purposes (though we may have to pay high rates), care being taken as to the advisability of the purpose. Our municipal securities are semi-public in character, having virtually the whole respective community at their back; and the supply if adequate in amount, with other moneys for farm mortgage loans that would continue to come if the demand for such revive, the farmer again feeling he may borrow,—this would also revive industries everywhere wholesomely. But the demand awaiting London is always enormous; while their finances have lately been so disturbed by the Balkan War that any full supply of money there will, for a year



or two, probably be but fitful and occasional; and for us to succeed at all we must give the best assurance we can that speculative adventures are no longer in favour with us, and that eschewing all extravagance we are in the settled resolve that any money lent us hereafter shall faithfully be put to productive use—an earnest and security for which we may adduce in the prudent conservative trading already observable among us under the controlling influence of the banks. Our actions are the best assurance we can give, and through them only can we expect to regain access to the English money market, so essentially necessary to our further industrial progress.

### III.

In common with the east the cities and towns of the West contain too many non-producers and non-distributors: an urban population should always bear a due proportion to the rural population the town or city serves. But perhaps the fault here is, not that the town populations are too large as that those of the country are too small; there are not so many people on the land as there ought to be on such an extensive area in use. A good number of townspeople are necessary, for the purpose of distributing goods, for finance and insurance, and for local domestic industries; while much work of diverse sorts for local needs may be done most conveniently near-by. Place may also be found for a light sprinkling of such ardent enterprising spirits as are alluded to above, so quick to perceive and seize opportunities to prosper, whose useful function it is to arouse a slow place to life.

Local industries are all-important. The development of any local advantage that may profitably be made marketable is by all means to be encouraged, as are grist mills and the like and any other local industries in whose favour there is distance from large industrial centres; and it should be felt as a loyal duty by every resident to prefer traders on the spot to those at a distance, even at some extra cost. Propertied and moneyed men, while supporting their investments, and others of influence, should too endeavour by all means to render life in their towns so agreeable that people there might be able to live in some degree of comfort. Sound industries and trades suitable to local needs are above all necessary for this, and these should have the active co-operation as well as the goodwill of wealthy citizens in establishing and sustaining them. But it is waste to carry on an unsuitable business anywhere; our attention in the West had better be given for the present not chiefly to industrial enterprises, but to the agricultural resources of a neighbourhood. On these alone can our rural towns be established well as centres of local industries.

The larger a city or town population becomes the better will it be able to reach out and compete for trade in smaller towns, for among the larger population will be found more skill and experience and ability to do work cheaply; whereby their industries will grow in importance till they become of the first rank. There are many sound and well established financial and industrial businesses in the Middle West that may be expanded, but the establishment of new ones just yet on any large scale would be most difficult. The rise of any very large manufacturing centres—of anything like a great factory system—except where special local advantages exist or the industry depends more on power than labour, has indeed been rendered unfeasible for the present by the high cost of living here, notably of rent and fuel; for while this condition prevails it will be impossible to get sufficient cheap labour.

We have a highly ozonized climate and sunshine of dazzling splendor—creating mirages it would seem on our prairies—under whose exhilarating influence the glamour of a harvest of hundreds of millions of bushels of wheat predicted for us every spring has had the effect of plausibly inspiring a vast nomadic host of migrating real estate speculators, operating everywhere, to cover in imagination the whole prairie country presently with flourishing peopled farms. This prospect has been lent countenance to by much undistinguishing praise lavished on the country and its resources by casual passers-through; and so English investors have been misled into buying prairie lands



at farm prices, many others here being similarly carried away by their own delusive optimism. Much money was made while they could sell as well as buy; but much embarrassment ensued when the selling became less easy, very many of the poorer sort falling into distress.

Dealing in real estate was the form the speculative spirit of our sanguine people took. It became the prominent feature—the very centre of their enterprise and a veritable school of gambling that continually attracted newcomers, who eagerly seized on it rather than settle down to the more arduous work of developing something of our resources.

The great access of population to the Western cities and towns within the past ten years—the air of prosperity there given (amid much real business) by bustling crowds, enabled the speculators, by action and reaction, under the same stimulating climatic influence, to achieve a corresponding though much greater rise in the price of town lands. Such a rise is incident to a very sudden great increase in town populations; but it belongs properly only to a period of town growth, and will stop when the real wants of the period are fulfilled. While it lasted with us—while the land could be sold on a rising market, great profits were reaped by the speculators, throwing an almost equally great burden on the occupying workers; and under that artificial stimulus prices were gradually carried up to a range that in general can be regarded only as—belonging to a stage of development we have not yet reached.

With an equally high cost of building, in these conditions, high rents have followed of course on inflated land values. For wage and salary earners, after the rent is paid, an inadequately small proportion of earnings is now left for the other necessities of life, including the most costly article of fuel; and this is felt as a burden by work-people of all kinds, who are in the predicament that while from under-supply high prices prevail in everything else they do not in labour, because this is in over-supply. So many have been attracted here by the lure of the West that labour, especially clerical labour, is over-abundant, which keeps the rate of their pay far below a due ratio to the enhanced cost of living; while shopkeepers and traders, with business stagnant, have a struggle to pay rent, or dividends in the shape of rent, on what is in its effect on them an over-capitalization of the land their premises occupy. But failing any relief to this, which it would seem is likely to come only from a great expansion of business, it is certain that such inflation of town values must sooner or later, wherever earnings cannot at all be made to pay correspondingly high rents—where interest on land values, in the form of rent, absorbs too large a share of the proceeds of a shopkeeper's sales, or of a tenant's income—wherever this is the condition it must end in a cessation of dividends on the excess values; that is, in a lowering of rents to their proper economic level, values being brought, as they always ought to be, to the test of revenue return, or at the most but a little above this.

With this inflation, cheap homes are unattainable. Any home indeed—any true home—is unattainable or difficult to maintain where a too great proportion of one's income is taken for interest on the cost and for taxes, or in the equal burden of high rents. Such a rate of expense therefore is driving people into apartment blocks, into a sort of limited co-operative housekeeping, which perhaps is cheaper, and doubtless is convenient for ladies alone and small families, but for the rest any such nomadic life is not conducive to the discharge of the duties of citizenship or a due feeling of loyalty to the city. There are, however, no less than three hundred and fifty apartment blocks in Winnipeg. Many are highly respectable, but all must be limited in accommodation, some so much so that the city solicitor warns us that they are on the verge of becoming slums. It is bad for family life where children have no back yard to play in, but must scamper through passages and corridors within doors for exercise. Parks, of which we in Winnipeg have plenty, and two or so of the very best on the continent, are a great though but occasional relief to this, but are not at all a substitute. A family must feel that they are but lodging in apartments; it is an encampment rather than a home, which will not arouse affection save in a slight

degree; the charm of home in the old fashioned sense cannot be there as a centre of family affection to which one can look back with emotion in after life.

A loss of our working capital, and so one cause of high prices, began some years ago with a large amount of money carried out of the West by strangers as profits on their real estate operations, burdening the land again to that extent for settlers; while further losses now come from sending money abroad for foodstuffs that could be produced as well at home, and from many of our moneyed people going abroad to winter.

Another though apparently but a remote cause of loss to us of working capital lies in the erection of life assurance, loan company, and bank buildings for larger than what is necessary for accommodation, and proportionately costly. The excess here cannot earn any rental. The building—this excess of building, has it is true given employment to workmen, circulating money for both material and wages, but the work finished, the cost of the wages paid directly and on the material is gone—it has been consumed; and so much working capital is sunk for ever afterwards, whose want will be felt until savings enough have been accumulated by the country to replace it. And similarly with residences needlessly large, whose excess is waste, unless their grandeur set forth, as a large house always should, some dignity of position or assumed character in the owners. This country has no surplus capital of its own that would in general warrant such dormant investments. Still, when the buildings are distinguished by beauty or design—when they adorn our streets, educating us and elevating that part of our nature that ranges above mere utilitarianism, we excuse the expense, though it be a little beyond what we can properly afford.

Other charges on our resources are interest payments on our vast borrowings abroad and our share of the general governmental expense on the civil service, which last for the whole country withdraws multitudes from productive and distributive industry. With respect to this, it is to state a truism that every dollar earned by the people must bare its share of the taxes levied, and the higher these become the more does the effective purchasing power of the dollar diminish.

The cost of living in Canada is higher than anywhere else; prices rise markedly as you go from east to west, owing partly no doubt to the great distance of the West from the industrial producing centres, the extra freight always adding to the cost of heavy goods here; coal, for instance, must pay so much freight per ton for every mile it is carried from the mine. But the high cost of living is partly due also to extravagant habits of living; though a moderate indulgence in these is not to be blamed overmuch; we are a virile race living in a most exhilarating climate and we must, if haply we are able, live a large generous life.

A high level of prices is not always bad. It is a mark of prosperity when accompanied by a high level of wages, denoting a higher standard of living for every one; while low prices with but little money denote the reverse. The prosperity must however be well balanced, founded on a sound and extensive industrialism able to give steady employment to working people of all kinds, and to afford them good wages. But for every one, however fit or unfit, always to have to provide for high prices is too strenuous a life, leaving at best too little leisure; and there is the danger of anxiety and distress should the prosperity fail even but a little; while a certain ill-effect is that they make the leading of a simple frugal life more difficult by insensibly fostering among us a luxuriousness foreign to the general habit of conscientious people.

The buoyant sanguine spirit that has done so much to raise the cost of living to us is not to be depreciated—it has also carried the country far on the road to prosperity, but that this advance may endure and be well founded something more is wanted now. The excesses of our late period of growth have ended through exhaustion of the subject and lack of means to go on; the sources of the seeming prosperity that accompanied it have failed; and we are driven to economy and retrenchment—that we may afterwards enter on a naturally succeeding and it is to be hoped more profitable period of develop-

ment and production, which if we use it right we shall certainly come to regard as a golden opportunity afforded us to firmly settle and establish the growth we have attained so far. This growth is by no means ended; only a pause has come for a staid period of consolidation that must intervene before any considerable further step forward can be taken with the best advantage. Let it be seen that an old fashioned attention to the business before us of *producing* become now the rule, no countenance being given to disturbing speculation. All should be got somehow at work—at work of useful development and production and distribution, through which alone can any true and permanent prosperity come to the country.

#### IV.

Whenever the subject of the resources of this Middle West—of what we produce—is mooted, when we look for what means we have to pay our way, the mind reverts at once to our wheat fields. We have other products than wheat; the oat and barley crops last year were of the value of 90 million dollars, and we have flax, fish, minerals, the timber that skirts our prairies, and many other things; but the market value of all these products together is less than the value of the wheat; they do not bulk so large to the mind nor so strike it as of the first importance.

This foremost place of wheat in our produce has come about from the good prices once obtainable for it for local consumption. But when under such favour it was grown in great quantity it became necessary to export the excess, and this came into competition in the British market, beside American wheat, with the wheat grown by peasant labour in Russia, India, Egypt, and Argentina. The price of their greater quantity of wheat then ruled the price of ours, and the return therefore for our higher priced labour became as low as theirs; though this effect was obscured to us for a time by the accident of good prices for wheat in Britain. The cost of living however is so much higher to our wheat growers than to their foreign competitors that when prices fell the profit left to them was at once felt to be insufficient and some relief is now being sought from the high rate of expense, in a new route to the sea, lower freights, a lower tariff, and a free wheat market to the South. And when we consider that we are growing wheat on the same wages as those peasants, although our scale of living is much higher, and when this is brought home to us, as it has been by the decline in the price of wheat in Britain in late years, we cannot but conclude that in growing it exclusively to the extent we do at such prices we are not making the best possible of our farm lands. In that perhaps we still instinctively cling to the traditional axiom that bread is the staff of life—which however it no longer is to the extent it once was for most people, who in becoming better off have got beyond that simplicity of living and now must have a richer and more varied diet of meat and luxuries of cookery. And as the poorer classes in Britain and Europe (our market) rise in intelligence, their wants too increase and they aim at a higher standard of comfort than any mere living on bread alone; which change it may be is one contributing cause of the low price of wheat now ruling. Yet with all this, wheat is a convenient cash crop for us; growing it is a sure means to get the ready money we must have every year to pay our way; we are under a necessity indeed to grow some considerable quantity of it to pay our living expenses and our current indebtedness abroad. Still, even for this purpose it should be merely an auxiliary to farming, not its chief object.

According to the Dominion Government statisticians the wheat crop of the three prairie provinces for 1913, from a cultivated area of 10 million acres, was 209 million bushels, of a total value (at 67½ cents the bushel) of 141 million dollars. The yield per acre for the several provinces was, for Manitoba 19 bushels, Saskatchewan 21·3 bushels, and Alberta 22·7 bushels, the average of all being 20·8 bushels, which, valuing the land at \$20 the acre, works out to cost with interest 57½ cents per bushel, leaving a surplus to the grower of 10 cents per bushel, or about \$2 per acre. The total surplus accruing to the wheat growers of the three provinces is about 21 million dollars, the remaining 120 million dollars being the cost of growing the crop with interest on the



value of the land. This amount of cost, with a proportion of the 90 million dollars produced by the oat and barley crops, has been the chief means of supporting a large rural population, in farm labour to a small extent and to a larger one in industries akin to farming, with something to the farmer himself, and so certainly has been a great gain to the country. That we have been able to realize these large sums from the produce of the land is an immensely important fact in considering the value of our resources. It shows the land has a substantial revenue-producing value, which without doubt may be greatly increased by more scientific farming. The difference now between the cost of growing the wheat crop and its sale proceeds is hardly indeed a safe margin of profit.

Before all things—and this is the conclusion of the whole matter—the productiveness of the land somehow should, as it may be, increased. A note of doubtful value indeed would attach to the land if the result from such farming as obtains must continue always so poor. The Government statisticians cited above state the total yield of wheat for all Canada in 1913 at 232 million bushels, of the value of 156 million dollars, from a cultivated area of 11 million acres, and the share we in the West take in this wheat culture is evidently too preponderant in our farming. The wheat crop of the three prairie provinces was nine-tenths of the total wheat crop of Canada, whereas our oat and barley crops were each only six-tenths of the total for Canada. So that if our wheat crop had been diminished by one-third or 70 million bushels, it would still have borne the same proportion to the wheat crop of the rest of Canada as our oat and barley crops bear. (The continued preponderance of wheat growing in the West comes now no doubt from the easiness of cultivating our prairie fields.) But though the wheat crop may be increased in yield per acre, yet other branches of farming replacing it partly would pay better.

We ought long ago more earnestly to have set about improving our agriculture; a way to do which would be not merely to increase the acreage under cultivation, as we are always doing, but also to make every acre yield more by higher intensive culture, with rotation of crops, and further by the general adoption of mixed farming, wherever there is some broken park-like land, and from the nature of the soil and a plenitude of water this is suitable and feasible. The amount of this mixed farming ought in general largely to exceed the wheat growing in extent and value; we should thereby avert the danger of loss through drought or hail or frost, and avoid the present necessity of rushing our chief crop to market at whatever price may rule, and so also the yearly recurrent problem of transportation would be solved. The railways would be busy all the year round instead of being as now over-busy for two months or so in the autumn; while the avoidance of the pressure to ship the crop would besides render feasible a co-operative use of farm machinery, belonging to a number of neighbouring farmers instead of as now wholly to one, every one owning a set, whose heavy cost is felt by all as too great a charge. And more important still, mixed and diversified farming by bringing farms closer together would afford better opportunities of social intercourses among the young people, so keeping them contentedly on the farm while the elders would also be kept there employed the year round. And as such farming flourishes in a neighbourhood so will local industries. The farm indeed is a field for increased productiveness that by serving also as a foundation for industries can, as nothing else can, promote trade and bring permanent prosperity to the West.

That in a general adoption of mixed and widely diversified farming—gradually it must be—lies our best hope, is happily coming to be seen more and more every day; in the last year or two a steady increase in the number of cattle kept on the farms has been discernible in passing through the country. The improvement should be encouraged by all means. The keeping of a proportionate number of cattle and sheep besides pigs on every farm might be effectually brought about by the banks in their temporary advances to farmers and by loan companies. Some wheat lands are certainly overcropped and cattle and sheep ought to be turned on them to restore their

fertility; signs are not wanting of a deterioration in the wheat we are growing—our old-time pride "No. 1 Hard," for instance is almost a thing of the past.

Homesteads have been allowed too freely to encroach on the ranges in the far West and crowd them out. Their cattle might otherwise by this time have stocked all the farms, so cheapening meat for the whole country, whereas now, failing any adequate demand from the farms, the western ranges have to export much of their cattle to the South, and this causes scarcity and high prices to the consumer. This want mixed farming would supply; while also near every town and city there should be extensive market gardens and poultry and dairy farmers the want of which is another great cause of high prices in our housekeeping. With such agricultural resources at hand it is most wasteful not to produce enough of such things to supply our townspeople, but to be obliged to import them at a great extra cost from a distance. With steady encouragement, the law of supply and demand would by-and-by come into operation here and redress the fault, the better prices obtainable for meats overcoming the excessive wheat growing.

This must always be mainly an agricultural country with farming its chief industry, and the ideal before us should for the present be to endeavour to establish first an industrious and prosperous community of farmers, who shall, while farming well, gradually adopt mixed farming where feasible; near whose farms there shall be many small towns and somewhat larger cities, where the farmers' sons on leaving home may build up suitable local industries, which would form the best foundation for more important ones that might afterwards be found advisable and be able to gain a footing in the neighbourhood. The people of the Middle West should all know something of farming; and sufficient land ought to be made available to townspeople somewhere near-by as a field for farming practice, in which they may learn (and then teach) its rudiments, raising household garden supplies in the summer season, instead of idling this wholly away camping out. In some such a way, if generally adopted in large towns, might be found a resource that would do much to alleviate the evil of occasional unemployment.

When this preliminary work is accomplished and our farms are producing greater wealth—wealth that now lies undeveloped, then will arise larger towns and cities here—the few already founded growing much larger, and worthily representing the realized wealth and importance of the Middle West. And then will the country generally be in such a condition of prosperity as farmers have never known yet, while a large population of industrial workers and distributors will be living cheaply and at ease.

J. H. MENZIES, F.C.A.

Bank of Nova Scotia Building, Winnipeg,  
June, 1914.





BOARD OF INQUIRY INTO COST OF LIVING,  
OTTAWA, June 28, 1915.

To the Right Honourable

Sir ROBERT LAIRD BORDEN, P.C., G.C.M.G., K.C., LL.D.,  
Prime Minister.

#### **SUPPLEMENTARY REPORT.**

A report by Mr. R. H. Coats, one of the members of the Board, prepared as an exhibit of the Statistical Branch of the Department of Labour, is transmitted herewith—together with two memoranda on the subjects of "Fish" and "Dairying" respectively.

The above, while containing materials transmitted with our former report as Appendices Nos. 1, 2, 3, 4, 5, 6 and 7, also contains new matter.

It is suggested that these materials be printed as Volume II of the report.

Mr. R. H. Coats, one of the members, has not signed the former report. His views on the subject of the inquiry, however, appear in Volume II.

Respectfully submitted,

JOHN McDOUGALD,  
*Chairman.*



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(2)

the time at my disposal. It has quite a lot of materials that are new to Canadian statistics. I unfortunately had no time to make an index, which is a serious lack.

Sincerely yours,

A handwritten signature in black ink, appearing to read "R. W. Coale". The signature is written in a cursive style with a long horizontal stroke at the end.

Professor Allyn A. Young,  
Secretary, American Economic Association,  
Cornell University,  
Ithaca, N. Y.



CENSUS AND STATISTICS OFFICE,

OTTAWA March 13th 1916

My Dear Professor Young,-

Very many thanks for your note of March 8th and your promise to give me the benefit of your criticism of Volume II. As you know, Commissions are not always satisfactory. I wanted to make a report from two broad points of view. First, an examination of the rise in "prices"- that is of the general economic situation; and second, a series of intensive studies in the main necessities. I only completed the first (which is Volume II-) and made an ineffectual beginning at the second (which is represented by the ~~notes~~ <sup>notes</sup> on fish and dairy products at the end of Volume II). The idea was to follow the latter with similar studies in meats, cereals, etc. and then "get down to brass tacks" with a series of cross-section generalizations on the operations of combines, tariff influences, marketing methods, etc. My colleagues, however, had other views, and I had not the energy to complete the job as planned. The result was that they threw their ideas together in Volume I (which, by the way, contains as "appendices" five or six hundred pages from Volume II- only set up in a manner which I do not approve) while I made the best of the situation from my own point of view in Volume II. You will see that the whole affair has been disappointing. However, I think as far as it goes the main memorandum of Volume II correlates the factors in the Canadian price rise and is about as good as I could <sup>have</sup> ~~make~~ it in















